Ezcad3 Text Marking

User Guide

Version 1.0 (2022.09)

PREFACE

Dear Customer:

Thank you for choosing Cloudray Laser System.

This fiber laser marking machine is intended for personal and professional use.

Cloudray is committed to providing the highest level of customer satisfaction and support. To ensure a favorable customer experience, we urge you to thoroughly read the documentation provided with your equipment.

Your satisfaction is essential to us, and we welcome your feedback. Tell us about your experience with Cloudray Laser Systems and our products.

Should you have any questions, please email the Cloudray Support Team.

Again, thank you for choosing Cloudray.

Sincerely,

Cloudray Laser

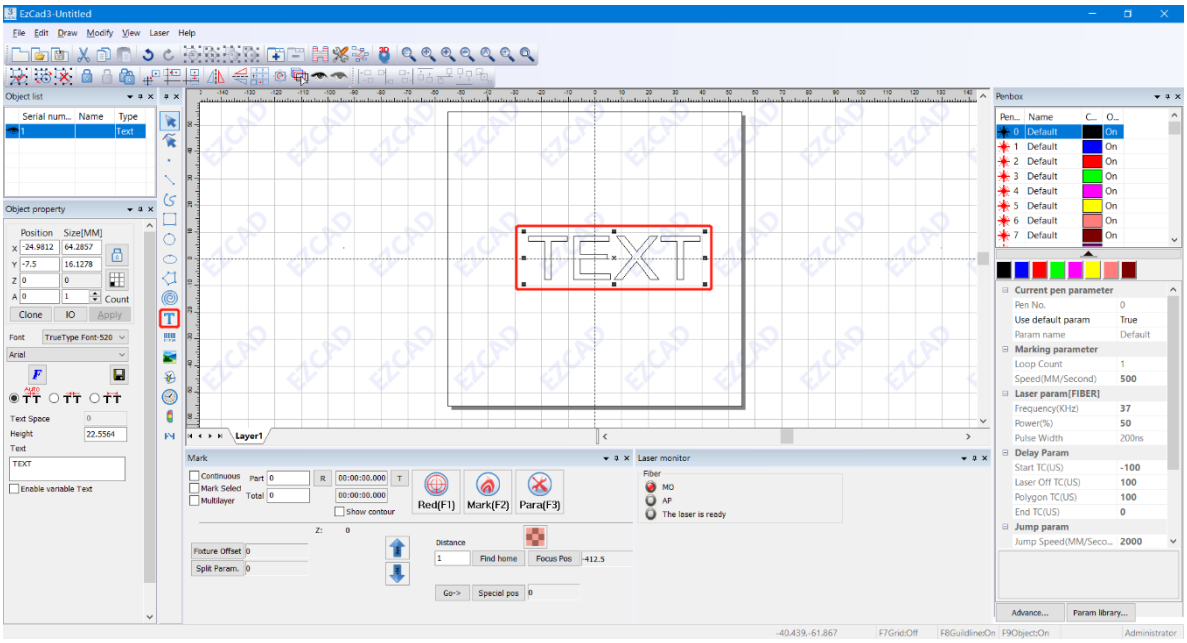
Cloudray cannot be held responsible for any direct or indirect damages, which result from using or working with the products electric circuits or software described herein. The apparatus must be used only by trained and skilled personnel. Before use the manual should be read and followed carefully.

Furthermore, Cloudray reserves the right to change or alter any product described herein without prior notice.

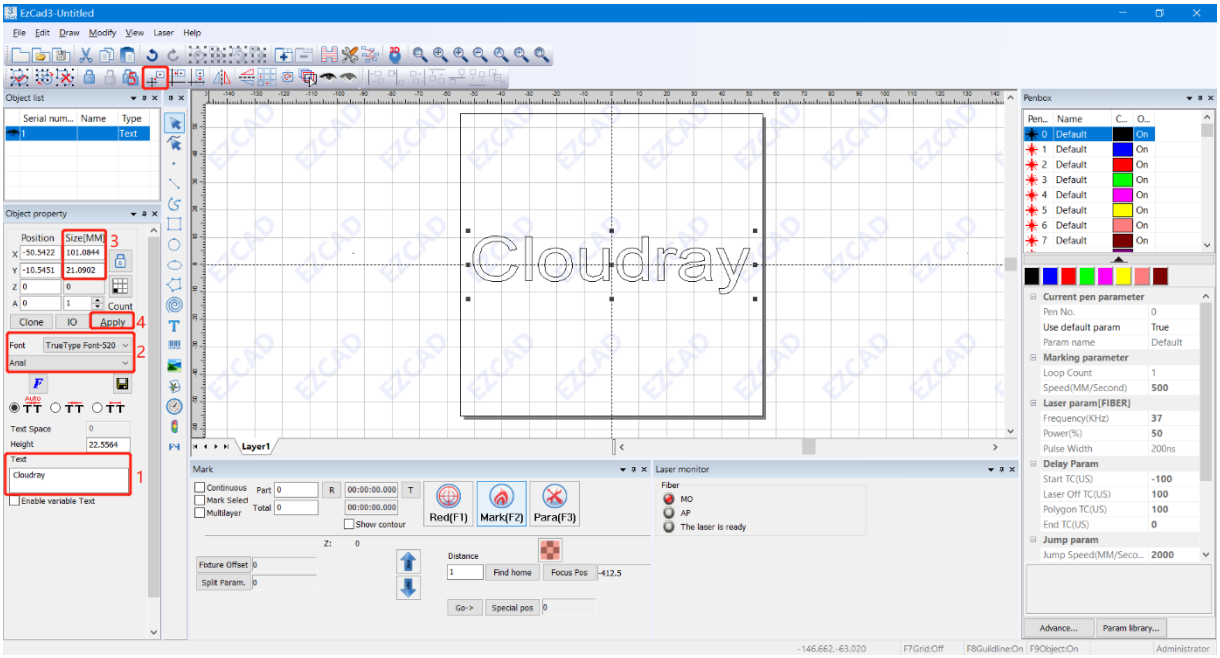
Important: Following steps are the operation steps after the laser control and the galvo control are normally debugged.

1. Text Creation

- Click the "T" icon in the creation bar on the left side of the software, and click to create the "TEXT" text in the workspace.

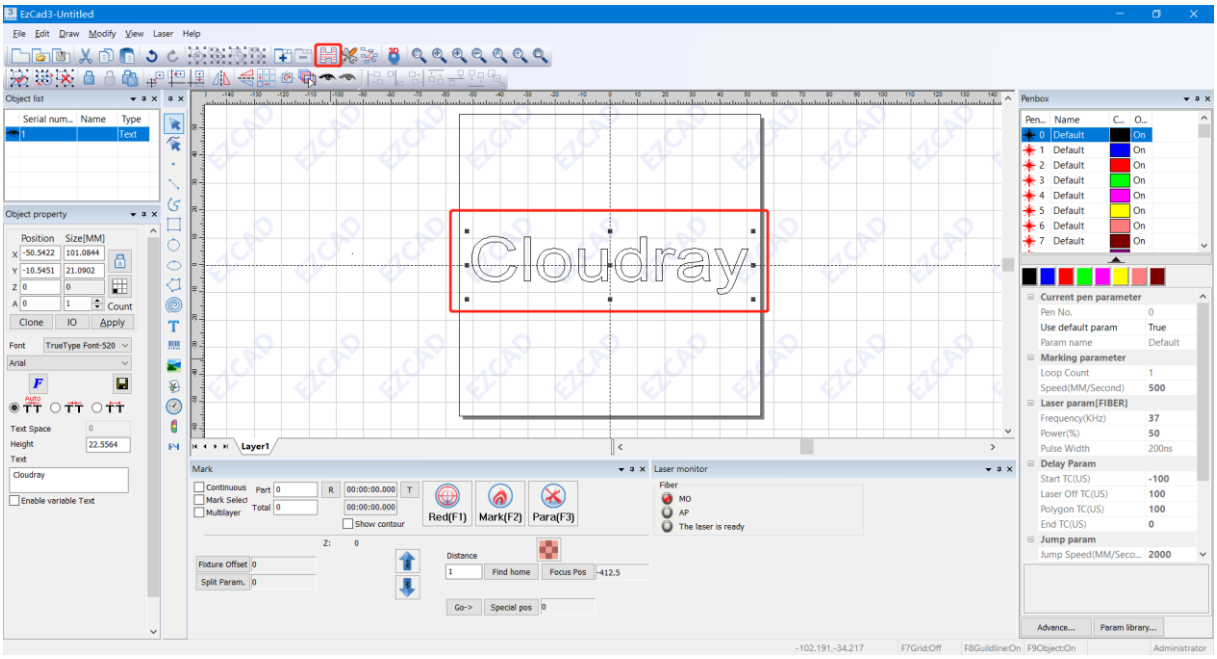


- Select the text and set the following text information in sequence in the object property on the left side of the software: Text >> Font >> Size >> Put to origin >> Apply.

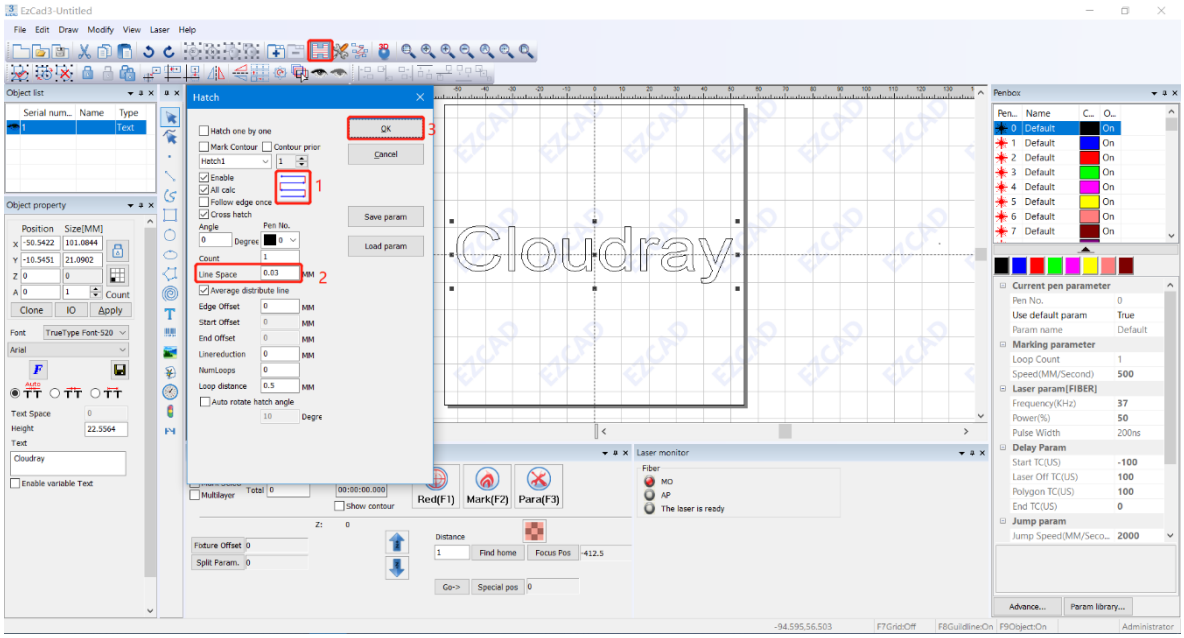


2. Text Filling

- Select the text and click the fill icon "H" in the view tool bar above the software.

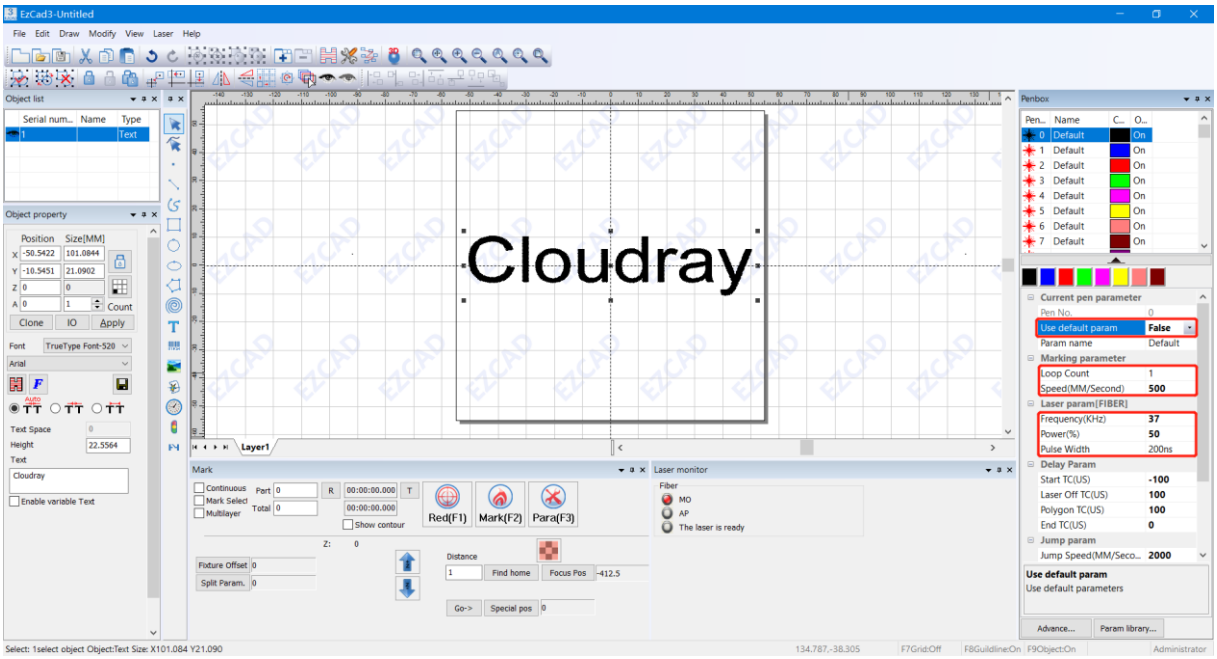


- In the Hatch window, select the filling method, modify the line spacing (other items are modified according to actual needs), and click "OK" to exit the window.



3. Parameter Setting

- In the parameter bar on the right side of the software, change the user default parameter to "False", set the required marking speed, laser power, frequency, and pulse width (Mopa laser only).



*Note: For laser parameter setting, please refer to the parameter table in the user guide.

Laser

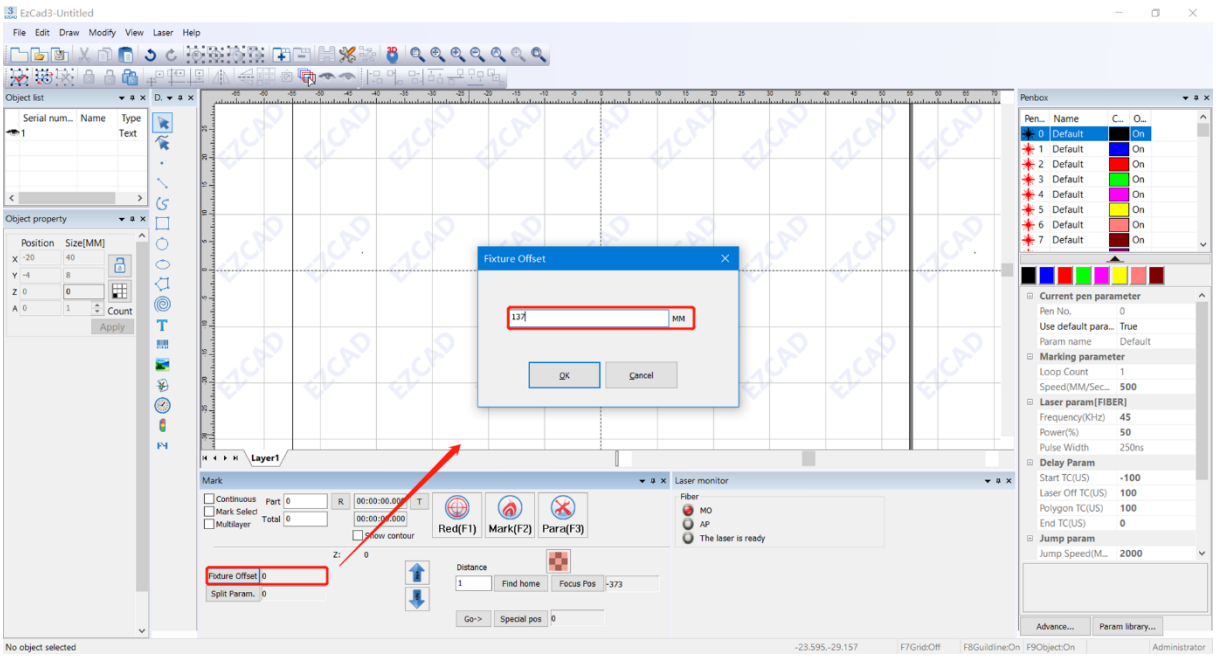
Laser (maintenance free)	Q-pulsed Fiber Laser				MOPA Fiber Laser	
Laser power (Depending on model)	20W	30W	50W	50W (LP)	30W (M7)	60W (M7)
Wavelength	1060 - 1085 nm					
Frequency (kHz)	20 - 60	30 - 60	50 - 100	40 - 600	1 - 4000	1 - 4000
Pulse width	120 - 150 ns @30kHZ	130 - 160 ns @40kHZ	120 - 150 ns @50kHz	200 ns	2 - 350 ns	2 - 500 ns
Cooling	Air cooled (filters)					

Galvo Scanner

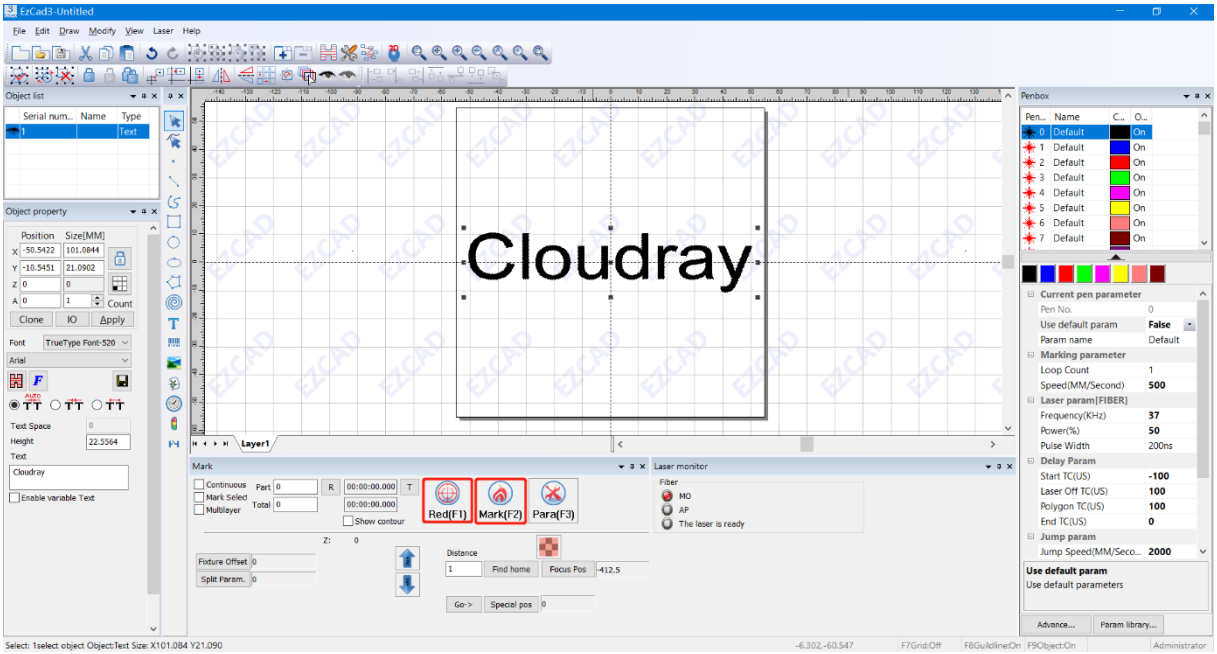
Marking area	F-160	F-290	F-420
	110 x 110mm	200 x 200mm	300 x 300mm
Focus diameter	~ 35 μm	~ 65 μm	~ 85 μm
Writing speed	640 cps (1mm single stroke with F=160mm)		
Max marking speed	2000mm/s		
Positioning speed	10m/s with F=160mm		

4. Start Marking

- Measure the distance from workbench to rotary workpiece, fill in the value to "Fixture Offset"



- Click the Red icon below the software (or press F1) to preview the marking position and size of the file, and place the workpiece at the corresponding position on the workbench.
- Click the Mark icon below the software (or press F2) to start marking.



*Note: Due to the different laser configurations of different machines, different materials need to be set with different parameters, and the parameters may need to be adjusted several times before normal work, thank you!