

# Cloudray Laser Laser Machine Troubleshooting Guide

THE PDF TROUBLESHOOTING GUIDES REPRESENT SOME OF THE MORE COMMON QUESTIONS OR ISSUES THAT YOU MAY ENCOUNTER WITH CLOUDRAY LASER. THE PDFS ARE LAID OUT IN A STEP-BY-STEP FASHION WITH SUPPLEMENTARY LINKS TO RELEVANT BOSS YOUTUBE VIDEOS. IF YOU THINK YOU NEED FURTHER HELP CONTACT US: info@ cloudray. com



- 1. Installation and driver
- 2.Software: Ezcad2/3 & Lightburn
- 3.Red Light Settings
- 4.F-theta Lens
- 5.Foot switch

## 1. Installation and driver problems

#### A short circuit was caused when the machine was installed

Unplug the power cable, ensure the machine is powered off, open the upper and side cover of the chassis (Remove three hexagonal screws at the front and back)

1. Check whether switching power supply for the galvo head is 90-264V(the left-most one), and the 24V switching power supply is at 115V

2. Check whether the wires at the back end of the button is broken, touched with the metal of the chassis or burnt.

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Yellow Exclamation Mark Issue in Device Manager

Please confirm whether you installed the driver software which is in the U disk. (The compressed file in the U disk is a backup file, which can be decompressed and used when the original folder is damaged.)



#### "Failed to open Imc device" error

Check whether there is a yellow

Exclamation Mark Issue in Device Manager. If yes, that means that you installed wrong driver. Please uninstall the current V2 or V4 driver and reinstall another V2 or V4 driver. Uninstall the installation video of the driver: https://youtu.be/jHvBR4P0T9g

## 1. Installation and driver problems

#### <u>"error code 52"</u>

After doing uninstall the driver & install the driver, it is recommended to restart the computer to see if the driver is normal. If the issue is not fixed, please show us related pictures or videos for us to check If still not work, Would you please record a video for us to check or help us judge where the problem is? More details concerning the technology problem when you use the product will be useful too.

	Laser Mark Control Board V4 [USB]		
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## Lightburn

#### Does Cloudray marking machine support lightburn?

At this time, only devices that are supported by EzCad2 or EzCad2 Lite software will work with LightBurn and only those that connect to a computer over USB. Raycus, JPT, IPG, and Max Photonics fiber sources, as well as CO2 laser sources are supported. (Max Photonics are JPT compatible)

Does Lightburn offer a free trial?

30-day free trial

#### Laser display "Disconnected" alarm

1. Shift-click the 'Devices' button in the 'Laser' window, you force LightBurn to re-establish communications with your device.

2.Try rebooting Lightburn, disconnecting and reconnecting Cloudray laser, shift click on Device, tried reloading Device, rebooting your lap top, Com port is selected.

3. Do you have multiple copies of LightBurn running, maybe? Or any other software that might be holding on to your COM port? Try bringing up the task manager (Ctrl+Shift+Esc) and seeing if anything is running that you don't expect, or a hung copy of LightBurn running in the background.

# Can use the EzCad2 software but can't get the Lightburn software

Software driver maybe wrong. Ezcad2 and Lightburn software have different drivers. If using lightburn software, you have to install Ezcad2 driver(Used by galvos), please check attached picture as referenced. Only one driver can be installed on a computer.



## Ezcad2

What's wrong with the prompt " can not open correct file" after opening the Ezcad?

It is because there is no correction file and the "Use the correction file" in the F3 parameter is checked. If there is a correction file, please select the correct path; if there is no one, you can leave "Use the correction file" unchecked.

Aspect Field 100.00 NM Offset X 0.000 NM Galvo1=X Galvo2=X Anzle 0.000 Degree	-Go to pos, after Hark
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How to solve the problem that the line are not straight when marking the grid?

There may be a coordinate problem with the galvo correction.



#### How to set to repeat marking twice by pressing F2 once?

Because it is a 20W laser marking machine, it is a little bit not clear enough, so I will mark twice. But I have to press F2 twice every time. Is there a setting method that it will automatically mark twice by pressing it directly?

If the power is not enough, you can increase the frequency and reduce the speed to increase the depth of marking.

If it is essential to mark twice at a time, you can check key F3 Parameters – Other – Auto reset mark count, and exit to change the Total number to 2 in the marking column.

## Ezcad2

After the driver is installed, the ezcad software still prompts that the dongle can't be found?

Win10 64-bit, the driver installation has been displayed, but the software prompts that the dongle cannot be found, what should I do? First, the marking board does not require an external dongle. Then check the followings:

1. There is a mismatch between the driver, board, and software. Try changing the software version.

2. Check whether the marking board is genuine and whether its specific model supports the corresponding computer system.

3. After confirming that the laser has been started, check whether the connection between the laser and the board is loose or not in good contact. Or just try another wire.

The image or text inversion problem of fiber laser marking machine

Just click on the parameter settings (F3) and select "Galvo 2"



Tips : Regarding the common problems of Ezcad2, most problems can be solved by reinstalling software and drivers.

## Ezcad3

"The correct file format is error!"

Please download the correct file: https://cdn.shopify.com/s/files/1/2222/7859/files/COR.rar?v=1671441314

<u>"Ezcad3 software licenses invalid"</u>

Reference video: https://youtu.be/NOL6BGIKJEs



The authorization code is as shown on the USB flash drive (for reference only)

## **3.Red Light Settings**

Red light preview outline lost, or it doesn't have the red light contour Just check this button "Show contour"



#### Red light pointer settings

- 1. Click the parameter button (F3)
- 2. Select "other"
- 3. Select "Red Light pointer"
- 4. Select "Enable always show"
- 5. Please confirm the save operation



## **3.Red Light Settings**

#### " See 3 red Points"

2 red light under the galvo head. Turn the focus wheel to adjust the two red dots to coincide to achieve focus.

1 red light from laser source, which is used for red preview.

#### The red light disappears

First determine where the red light disappears, galvanometer or fiber laser;

1. Galvanometer: The two red lights at the galvanometer do not emit light, and the ±15V switching power supply is faulty; If only one of the two red lights at the galvanometer does not emit light, then the red light is faulty.

> 2. Fiber Laser: Restart the software to check if the red light is on. If not, the red light that comes with the fiber laser may be faulty or the red light in the laser path is faulty.

#### Laser stopped working, the red light disappeared

Restart the software; if the laser does not work, check the  $\pm 24V$  switching power supply; if the power supply is normal, then the laser or control card may be faulty.









Red Dot Pointer in Laser Path



Fiber Laser With Red Dot Pointer

## 4.F-theta Lens

#### How do I change the focus lens to work with the 110 x 110 lens?

As a reference, please check the Youtube video :

How to adjust the focal length: <u>https://youtu.be/fp-0jzAmX6U</u> How to do with marking size not fit: <u>https://youtu.be/8usA4ucynrw</u>

Therefore, it is necessary to set the correct focal distance between the marking head and the workpiece before any marking. An incorrect focal length is the most common cause of poor or indistinguishable markings. The focal distance (A) is measured between the lower edge of the galvo head (B) and the upper surface of the workpiece (C). The correct focal distance depends on the F-theta lens used (focal length)

The laser galvo sporadically started moving in unwanted directions.

Thank you for contacting Cloudray Office.

1. We feel sorry for the inconvenience with your order. Would you mind offering us your order number so that we can check for you? And please provide the label picture on your current laser.

2. The issue you met may be related to switching power supply for galvo head.Would you please record the working video for us?

### 5.Foot Switch

#### How to connect the foot switch of the laser marking board?

Key "F3" parameters – "Port", find "Start Marking IO", select the "Input" port number. It is necessary to select the generic IO port on the board. The input port number on the software should correspond to the GIN number on the board (note: it is not the pin number, but the generic input port number corresponding to the pin).

Just connect the switch signal of the foot switch to the input port, and connect the other signal to the GND on the board.

The level is set to HIGH, because it is connected to the 5V power supply, and the laser marking starts to work after the power is turned on. If the low level is selected, the marking will continue without pressing the foot switch.

Why does the laser marking machine not respond after changing the foot switch?

1. The signal line is not connected to the interface.

Check whether the 1-pin and 14-pin or other pin ports of the con4 interface of the laser marking board are connected.

2. Software settings.

It may be that the software has been reset, and the input port needs to be set in the software Param(F3) – Port – Start Mark IO. There are 15 ports in it. If you are not sure which port is used, you can test them one by one until the foot switch responds. 3. The foot switch of the laser marking machine is damaged.



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# **CONTACT US**

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 Email: info@ cloudray. com