



Thank you for your purchase for Laser Product from Redsail Technology Co., Ltd. This User Manual is instruction for Laser software of Redsail Laser Engraver M3050.

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Statement

1. The contents of this manual may be different from actual products due to product upgrade, improvements, etc. The contents of this manual is subject to changing without prior notice.

2. The illustrations in this manual may be different from the purchased products due to product improvement and so on.

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II Laser engraving machine software operation instructions

Laser engraving cutting software includes three types of software, one is Coredraw direct output of the software (hereinafter: Coreldraw-laser), one is WinsealXP, the other is LaserDRW. Coreldraw-laser is mainly used in carving crafts. This manual is instruction for Coreldraw-Laser software.

1. Software installation and startup

1.1 Coreldraw-laser Features

Mainly used for motion control, is an important part of laser motion control, through the computer to achieve effective control of laser CNC machine tools, according to the different requirements of users to complete the processing tasks, it has the following functions and features:

1. Coreldraw-laser is a plug-in module installed in Coreldraw, the direct use of the Coreldraw powerful editing features, such as: zoom, rotation.

2.Almost Support all format files which is supported by Coreldraw, including vector format (eg PLT, AI) and bitmap format (eg BMP).

1.2 Environmental requirements

- 1.CPU586 above, the proposed PIII or PIV above
- 2.Memory, it is recommended to use more than 1G
- 3.Windows2000 / XP / 7, suggest to use Windows7 operating system
- 4.Support Coreldraw9 and above all versions, it is recommended to use Coreldraw X3 or X4

1.3 Installation and Startup

1.3.1 Installation

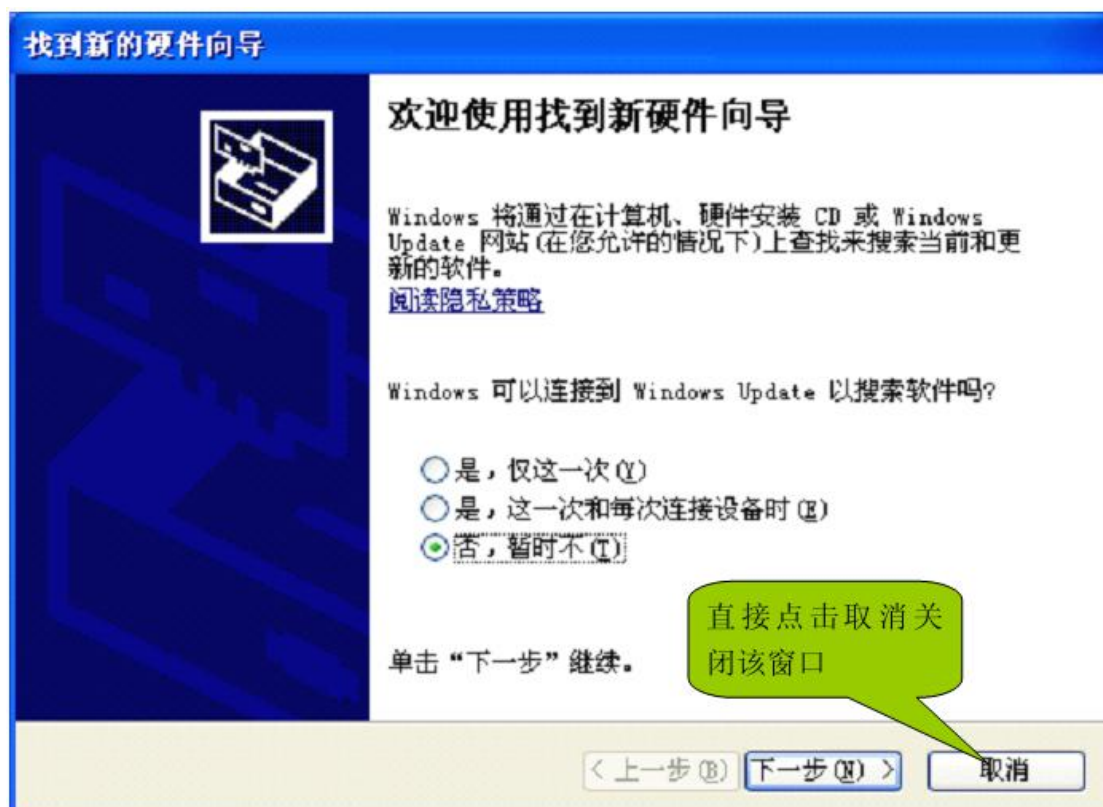
1.Make sure the computer has been installed Coreldraw before Install Coreldraw-laser, if not installed, please install Coreldraw in your computer firstly.

2.2.Firstly, insert the orange USB dongle into the USB interface of computer, and use the USB data cable to connect the machine and computer, keep the boot. As shown in Figure F1-1





F1-1

Open power switch in control panel of laser machine, the computer will pop-up "find new hardware wizard" as below:



Click the Cancel button to close the small window.

Open the CD  安装软件 Double-click  CorelLASER 2013.02 , Pop-up a dialog box to select the language as shown in Figure F1-2:



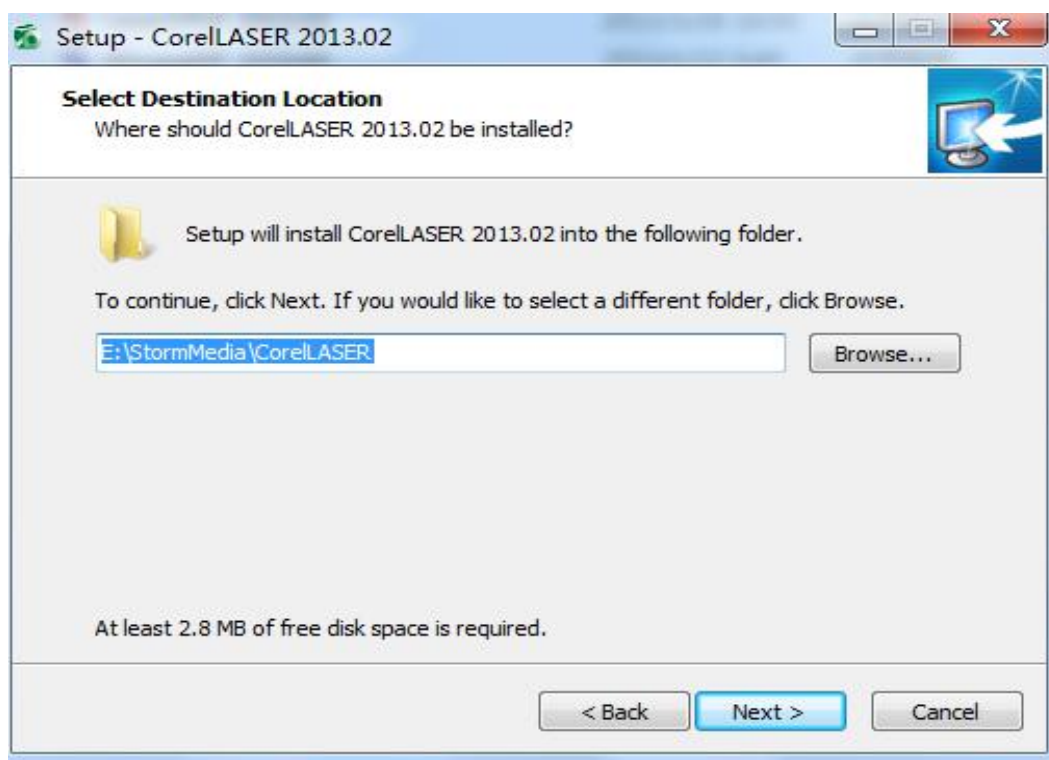
F1-2

Click to select English and click "OK" appears F1-3 shown



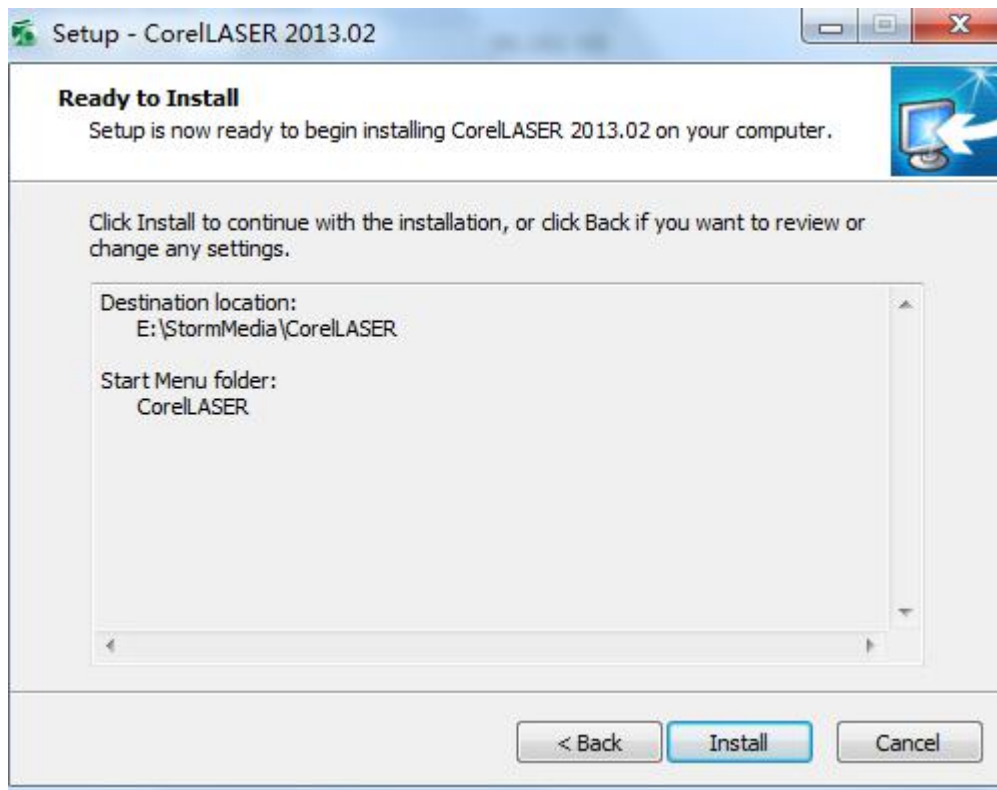
F1-3

Click the "next" software to select the path (in pure English path, the best is the default path), such as F1-4 Figure



F1-4

When finished, click "Next" "Next" "Next" pop-up, such as F1-5 dialog box





F1-5

Click "Install", the software automatically installed, and finally click Finish.



The installation is complete. **Note: Do not open any software.**

Install software LaserDRW

Open the CD  安装软件 Double-click  LaserDRW 2013.02 ,Pop-up a dialog box to

select the language as shown in Figure F1-6:



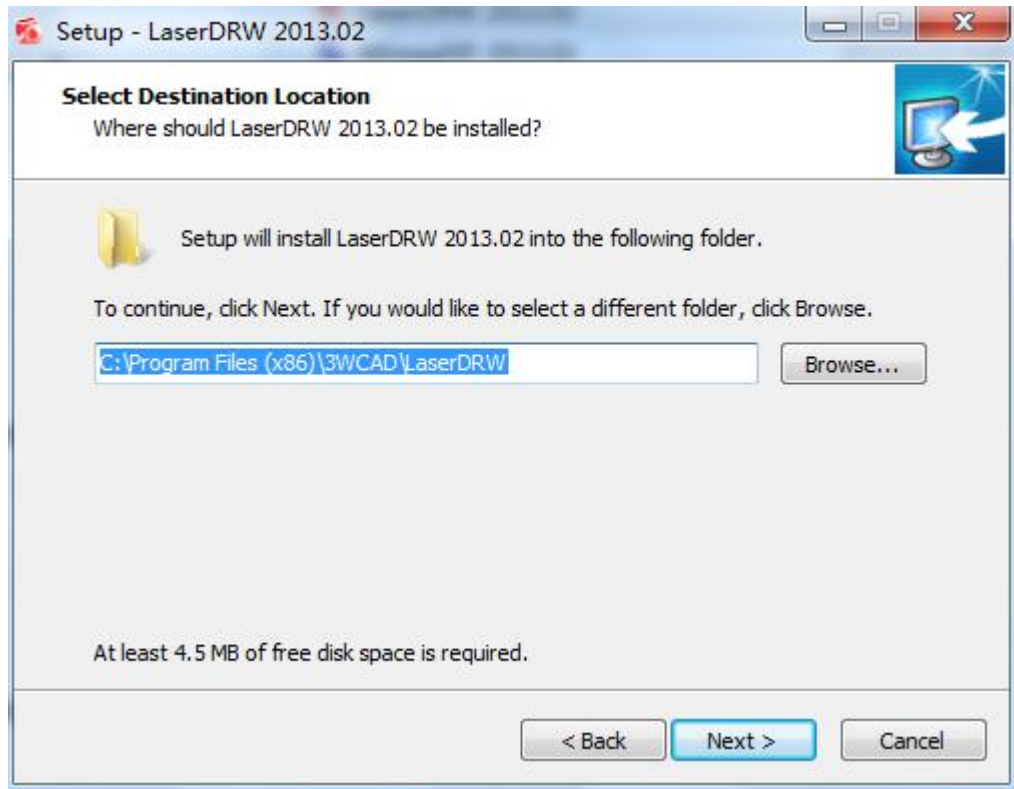
F1-6

Click to select "OK" appears after F1-7 shown



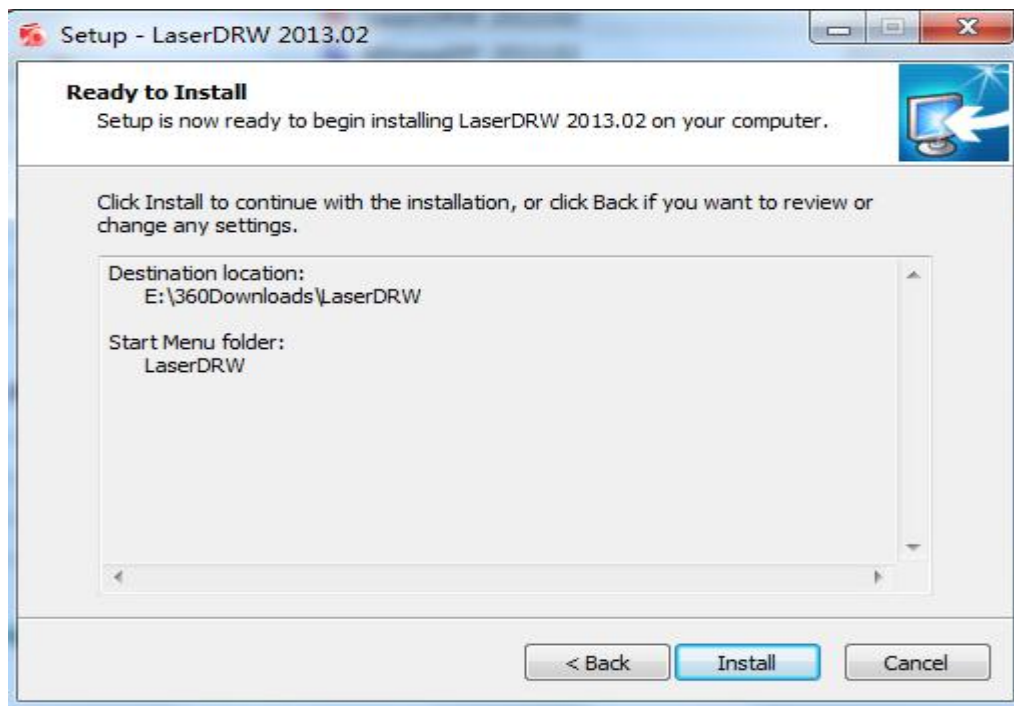
F1-7

Click "Next", the software selection path (in pure English path, the best is the default path), such as F1-8 Figure



F1-8

When finished, click "Next" "Next" "Next" pop-up as F1-9 dialog box



F1-9

Click "Install", software automatically installed, and finally click Finish.



Software WinsealXP installation same with LaserDRW

At this point, the engraving machine software and engraving machine driver installation is complete!



Note: The computer desktop will add the following three icons



Click the desktop shortcut to open the software, If the customer engraved




chapter, please open . If it is engraving, cutting, please open or



(Recommend CoreLASER)

1.3.2 . Start up



1. Open , The main interface of Coreldraw is displayed as shown in Figure F1-10



F1-10

2, Instructions for using Coreldraw-Laser

2.1 Engraving machine parameter settings

A. Open the Properties Settings button in the Coreldraw-Laser toolbar as shown in Figure F2-1



F2-1

Pop-up "laser engraving machine properties" dialog box shown in Figure F2-2



F2-2

General the motherboard verification code has been set up in the factory, and burn to the disc, the user no longer need to change. Control panel model and page size, please refer to this figure to set your engraving machine parameters. Set up, click "OK" and turn off the engraving machine software, and then start the software, Engraving software will register laser engraving machine as shown in Figure F2-3



F2-3

The following attributes of the settings are explained:

1. Control board model

Redsail M-3050 adopt 6C6879-LASER-M2 type motherboard. If the motherboard model selection error, engraving machine will be a demonstration of work (very slow)

2. Logical resolution

The logical resolution of the machine is 1000dpi. Logical resolution is set incorrectly, the engraving output size does not match the actual size of the graphics. For example, if the 1000dpi engraving machine set to 2000dpi, the actual size of the sculpture will be magnified once!

3. Maximum speed

The machine's maximum actual speed is 400mm / s

4. The position of the origin

The mechanical part of the design of the origin is the upper left origin

5. Do not check the "Laser head for horizontal (vertical) motion mode"

If checked, the engraver plotter is in the horizontal (vertical) motion mode

6. Motherboard verification code

Board verification code is engraving machine control panel ID card, verification code engraving machine on the motherboard. If you do not fill in or fill out the error, the engraving machine will fail to register, can not work. (Note: the use of CD-ROM installation software, customers do not need to re-enter the verification code. CD has been written)

Complete the above two settings, click "OK" to close the engraving software, and then restart the software, engraving machine can work!

7. Page origin / page size

The page origin is the starting coordinate point of the actual engraving format. The page size is the actual size of the engraving

8. Carve thread priority setting

The default is "only idle when the implementation of" This setting, meaning engraving software engraving, and any program to grab resources, does not affect the smooth running of any program, only when the computer is idle. Note: If the computer is running too many programs, the engraver frequently stop to wait for engraving data, it is necessary to properly raise the priority level, close some applications on the computer.

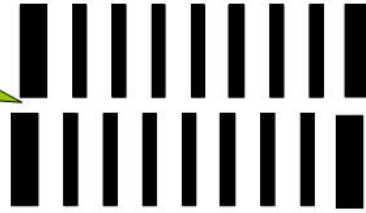
9. Compensation of reverse run

The mechanical part has been adjusted well. However, when two-way engraving by the mechanical precision, laser switch delay, etc., generally from left to right and from right to left sculpture may not be a good alignment, this software can compensate for the value of the adjustment. As shown in Figure F2-4 F2-5



F2-4

测试回程误差时雕刻出来的测试样品。如果发现上下错位位置很大(超过 0.2mm), 则说明机械精度要修正, 比如同步带过松、同步带磨损严重、轴承磨损后间隙过大等等。机械精度修正之后, 我们再设置合适的回程补偿数据, 由雕刻软件去修正其余的误差



F2-5

Note: The compensation value is generally not over 3, you can adjust the mechanical part of the belt tension and software compensation value of the two methods of reverse commutation, so that the error of bi-directional sculpture close to 0.

10. Running - in mechanical properties

So that laser engraving machine engraving faster and more smoothly

The new machine, without running the track high-speed engraving may appear as text carving gestures crooked, round borders do not look round, square border is not straight and so on. Can be improved by running the track.

Running the laser engraving machine track, you need to set the X-rail length, Y-rail length. So as to run the whole track, rather than just running part of the track. The track X track length 600mm, Y track length 400mm. Let's take the X-track for example: the maximum extent of the car running on the beam, that is, X-rail length. As shown in Figure F2-6



F2-6

Note: the use of run-in function better maintenance of laser engraving machine

1. After using the machine for some time, give the engraving machine some mechanical parts of the lubricating oil, you can run through the function, so that the X / Y track back and forth 100 laps, so that lubricants can be evenly covered with mechanical parts surface, the better.
2. For some users only carving small things, the machine lubricating oil, the use of run-in function, X-track run 300-500 back and forth, so to extend the life of mechanical parts.

Engraving small things, the mechanical part of the long-term wear part of the track only, this small part of the wear track if there groove, the mechanical part can not be used, so by the lubricating oil conservation machine, run the other parts of the X orbit, The track is closer to uniform wear. The uniform wear track is theoretically equal to no wear.

B.Set the Coreldraw-Laser data transfer method

Open as shown in Figure F2-7 button



The dialog box shown in Figure F2-8 will pop up



F2-8

Note ① Engraving area, cutting area: All pages, current page, selected. If you want to carve (or cut) a portion of the CorelDRAW page, select the part and set the engraving area (or cut area) to the selected one.

Note ② When CorelDRAW outputs HP-GL / 2 (PLT) graphics data, there is a very interesting option: to retain (or delete) the graphics overlay function. This function, and sometimes very useful. What is the graphical overlap area? If you choose to delete the HP-GL / 2 (PLT) graphics overlay, the left image will be cut to the right of the image, that is: the user is painting the left, but the cut is Cut to the right (the cut output is not the same as the one plotted by the user). This feature simplifies plotting and reduces the difficulty of plotting.

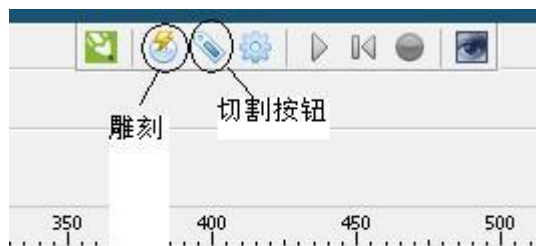


F2-9

Note ③ For cleaning sculpture, the larger the pixel step, the lower the engraving resolution, but the carving efficiency will be higher. The same laser power, the greater the pixel step, the more shallow carving depth. But for the cut, the pixel step size control curve cutting curve resolution, the greater the pixel step, the lower the resolution of the cutting curve, the slit of the slippery worse. If "Default Pixel Step = 1 Step" is selected, the pixel will be cut in steps of 1 step, regardless of the pixel step size setting.

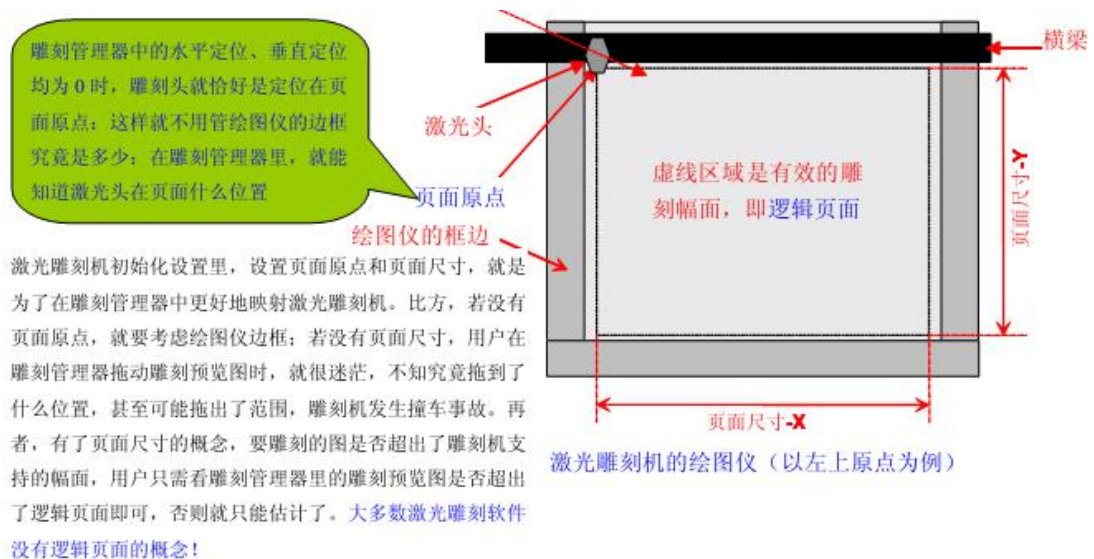
C. Learn about the engraving manager

Line up version, Click the carving or cutting button as shown below, the final will pop up as shown in Figure F2-10 of the sculpture manager





F2-10



F2-11

The following describes the settings in the engraving manager

1. Rotate

Convenient materials placed, and sometimes can improve the carving effect

For horizontal materials can not be put into, Vertical can be put into, use this function

2. Mirror

Engraving anti-photo anti-word, general printing and engraving seal used in this function.

3. Style

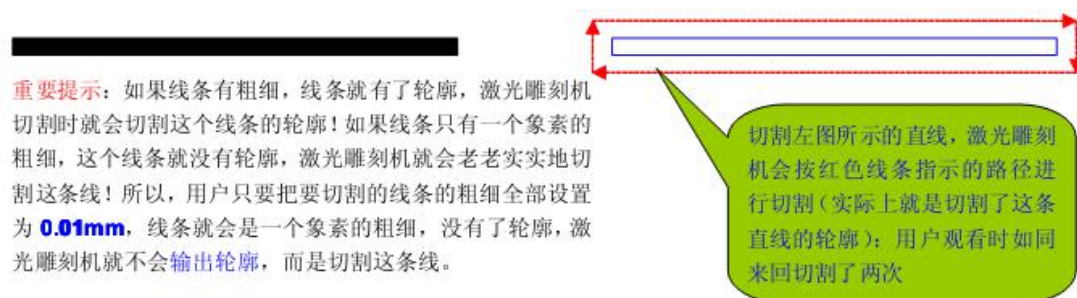
Engraving machine how to perform processing tasks, there are three general styles: engraving, cutting, marking.

Engraving: cleaning mode, work in the branch scanning mode, can be divided into Yang carved, incised. Engraving work in dot matrix scanning format;

Cutting: that is to be carved graphics contour cutting out, do not deal with the contours of the internal. Cutting can be used for contour output, drilling, Crochet, cutting words, laser tracing, laser marking and so on. Cutting mode work in vector format;

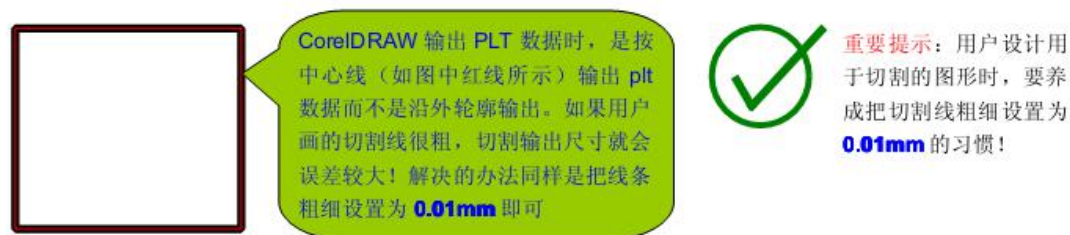
Marking: Marking and cutting methods similar, but the marking method, not only describe the outline, but also on the outline of the internal filling.

For the cutting mode, a lot of customers reflect a straight line, how to cut back and forth twice? The following figure F2-12 to illustrate the reasons for cutting back and forth twice



F2-12

When drawing in CORELDRAW and use PLT data for cutting, the user will sometimes cut out of the wrong size, which is mainly caused by two reasons: First, output PLT data, the default resolution is 1016dpi, while the sculpture Machine is not 1016dpi, but 1000dpi, then cut out the size will be too large. The solution is very simple, is to set the CorelDRAW output PLT data, the use of the same resolution and engraving machine can be. Second, the user design cutting graphics, the line did not notice the thickness! As shown in Figure F2-13



F2-13

4. Incised (Yang carved)

Yang carved out of the effect is raised by graphics, carved out of the effect is depressed by the text

5. Cut outside the line

This function is only effective for positive engraving, mainly for engraving of engraved stamps or the like What is the role of the outer edge engraved? First, in the large-size material engraving small size seal, for example, in the 42mm material engraved 40mm seal, if the edge is not carved out, then the 40mm seal, edge will be thick 1mm, this display is not acceptable. Second, in the side of the material carved circular or other

shape of the seal, the edge of a little carving, as the cutting reference line, easy to cut.

6. Position the border

This function limits the graphics to be carved within the borders of the specified shape
There are two main roles:

First, carving seal, the shape of what needs to be engraved on the seal, to select what shape the positioning border.

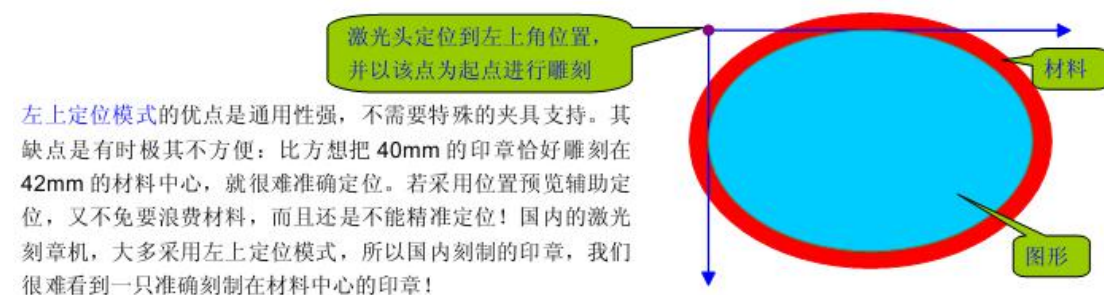
The second is to determine the location preview, laser engraving machine to go what kind of border! Location preview is to know in advance, before engraving, what the engraving opportunity will carve into the location of the figure, what area. For example, the user selected a square positioning border, the location preview, laser engraving opportunity to take a square border, and draw a square in the material, that sculpture will be carved in this square within the square.

7. Positioning mode

This function controls how the laser engraving machine is positioned, there are four kinds: Top left, center, horizontal center, vertical center (* key content)

Top left positioning mode: Laser head positioning to the upper left corner of the graphics, is the most common positioning mode, is the most simple positioning mode shown in Figure

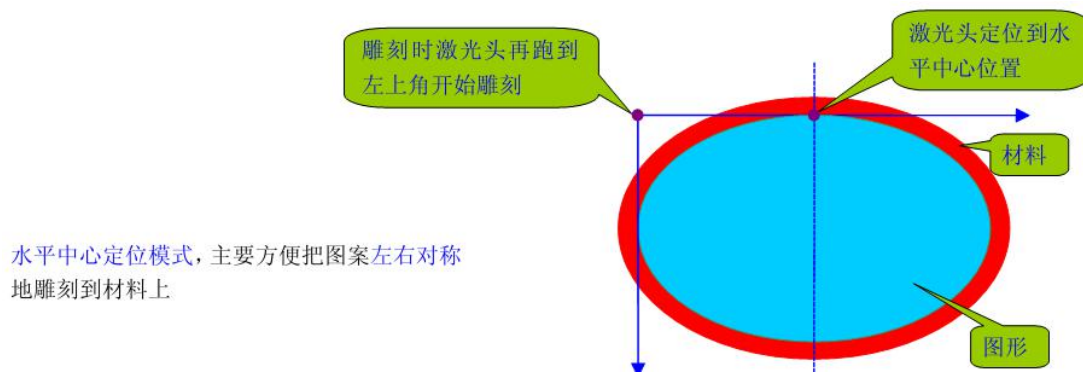
F2-14



F2-14

Center positioning mode: laser head positioning to the center of the graphics, and sculpture, the laser head and then went to the upper left corner of the graphics start carving, the need for material size, graphics size to jointly decide, generally do not use this positioning.

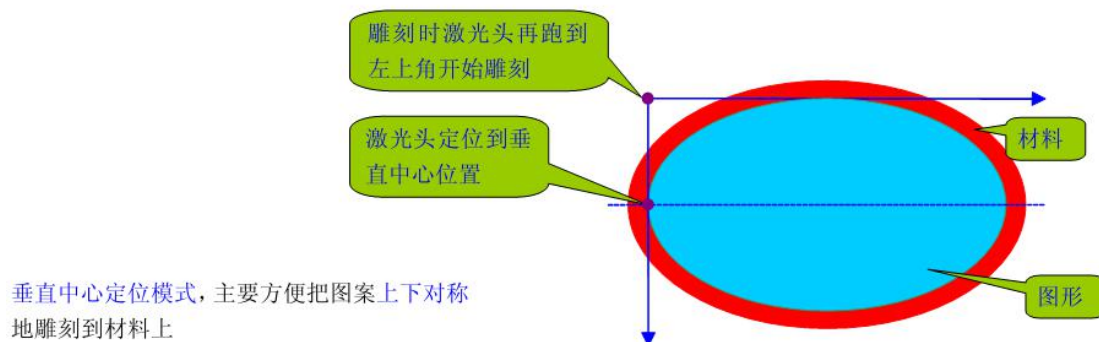
Horizontal center positioning mode: The laser head is positioned at the horizontal center position of the graphic. When engraving, the laser head then runs to the upper left corner of the graphic to start engraving.



F2-15

Vertical center positioning mode: laser head positioning to the vertical center of the graphics, carving and then head to the graphics of the upper left corner began to carve, as shown in Figure

F2-16



8. **Horizontal positioning**, vertical positioning: the function of the laser engraving machine laser head positioning to the specified location
Laser head positioning to the specified location, but the sculpture is not necessarily from the positioning point of the beginning of sculpture, have to look at the kind of positioning mode used. If the top left positioning mode is selected, the positioning point is the starting position of the engraving. If the center positioning mode, horizontal center positioning mode, vertical center positioning mode, then the positioning point is only a reference point, rather than the starting position of the carving.

9. **Does not return to the origin:** This function can control whether the laser engraving machine to return to the origin (re-alignment) before engraving, the end of the sculpture is also back to the origin.

Select whether to "**do not homing**" as needed. For example, the user wants to release the motor, unlock the track after engraving. It's easy to pick and place the material, then do not select the " Because before the carving, sculpture are back to the origin, more waste of time.

10. **Release motor:** This function unlocks the plotter track of the laser engraver, allowing the track to move freely The role of the release motor: 1, to facilitate the pick and place materials. 2, manual positioning. For example, in the case of a rotary table, it is necessary to manually move the laser head to the rotary roller. 3, power saving

11. **Task mode**: This function is mainly used for automatic batch output and hierarchical output, laser engraving machine is the advanced features (* **key content**) Task in two ways: First, interactive session tasks, and second, layered output tasks. Laser processing, there are two cases: one is a laser engraving machine to complete a task, the user wants to stop laser engraving machine for a while (such as the user pick and place materials), and then laser engraving machine go on the next task, in this case, select Interactive session task, just as there is a conversation between the engraving machine and the user process. Another situation is that the user wants the engraving machine to combine several tasks into one task, for example, the user wants to engrave several small brands on the material, and then let the engraver cut these small brands one by one, in this case, the user It is necessary to do two maps (layers), one is the carving map (layer), one is cutting the map (layer). The user in turn sends the engraving map (layer) and the cutting chart (layer) to the laser engraving machine. The laser engraving machine automatically synthesizes these layers as a task. This is the hierarchical output task mode. For detailed operating instructions, please refer to the next section 1.4.3 "advanced application of engraving software"

12. **Pixel step**: This function is used to split the resolution of laser engraving machine, improve engraving efficiency, and sometimes can facilitate the mapping. Modify the pixel step is to modify the laser engraving machine resolution, the greater the pixel step, the lower the resolution of laser engraving machine, engraving efficiency is higher. Pixel step and the relationship between the engraving effect: the same laser power conditions, the smaller the pixel step, the deeper the depth of carving, the more flat the floor. Under normal circumstances, the pixel step size is set to 2.

13. **Repeat Engraving**: This function controls how many times an engraving task is output

Repeat engraving has three main functions:

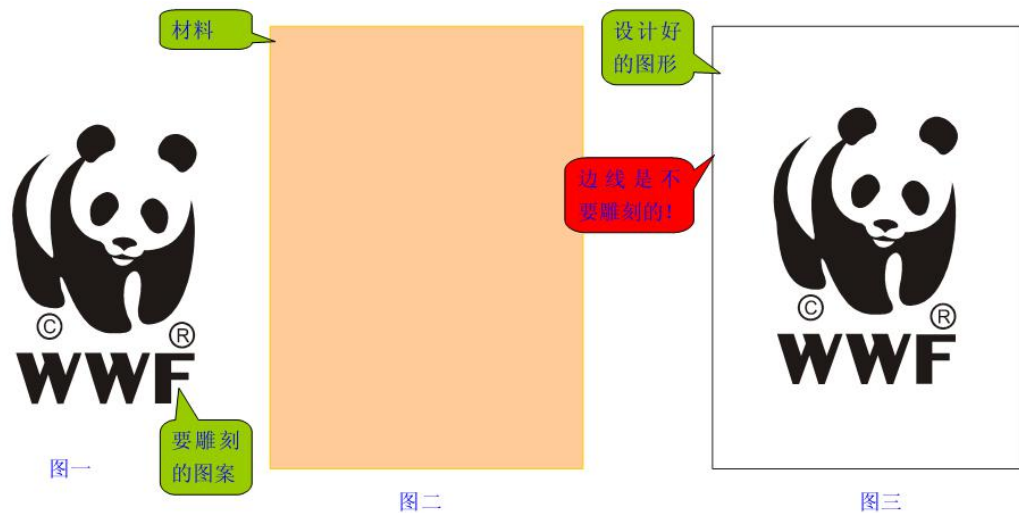
1, the laser power is not enough, carving depth can not meet the requirements, set the number of repeated engraving 2 or greater, so that laser engraving machine more carved several times to deepen the carving depth;

2, laser cutting, the thickness of the material, the laser can not cut through the material once, set the number of repeated engraving 2 or more, multiple cutting, you can cut through the material;

3, handicraft batch engraving, set the number of times to repeat the sculpture can be carved. The internal mechanism of repetitive engraving is interactive multi-tasking. When the engraving is finished, the laser engraving software will ask the user whether to continue engraving, if the user does not want to continue carving, cancel.

14. **Laser Intensity**: This function is temporarily disabled.

15. **Output Boundary Line**: Controls whether the laser engraver outputs the boundary line of the graph, which is a very useful and very important function (* **important content**) For example, as shown in Figure F2-17, you want to engrave the pattern into the center of the material. The user has designed the figure 3 (with a border) for engraving. However, the user just wants to engrave the pattern to the center of the material , Do not want to carve the border line, do not check the "output boundary line" can be.



F2-17

Important hint:

- 1、the border must be rectangular (rectangle or square), rather than want to draw what can be;
- 2、the thickness of the border line set to 0.01mm. If the border is too thick, it will introduce errors, because CorelDRAW calculated size is calculated from the center line of the line.
- 3, the boundary line must be a solid line, can not use the dotted line, or carving software can not correctly identify the boundary line.

16. **Position Preview:** Preview the area to which the graphic will be engraved before engraving

Before you perform a location preview, select the location border. Position preview is to draw a border on the material - the user selected what kind of positioning border, the location of the preview machine when the material in the engraving machine to draw what kind of border. Observe the location of the border to draw a preview, you can understand whether the positioning to meet the requirements, such as does not meet the requirements, modify the location data until you can meet the required location.

17. **Save parameters,** extract parameters: the user can save an unlimited number of carving parameters, the use of a parameter, as long as the extraction parameters can be. Engraving parameters is the positioning coordinates, engraving speed, engraved carved, mirror or not, and so a series of data associated with the sculpture.

18. **One-way engraving:** one-way engraving corresponds to the two-way engraving One-way engraving of the reverse error is 0: because the one-way engraving, the reverse is not carved, the effect of one-way engraving is theoretically the best, but only half the efficiency of two-way carving.

19. **Change the axis:** Engrave the axis is the exchange of X-axis and Y-axis function Under normal circumstances do not use this feature, because the Y axis is the support shaft and load shaft, not suitable for high-speed movement.

20. **Engraving to file:** Create reusable carved knife path files to simplify laser engraving (* highlights)

In the engraving manager, if you select engrave to a file, you can create a toolpath file. Create a toolpath file and the actual engraving, the operation is exactly the same. The difference is: the actual carving of the sculpture data is sent to the task queue to wait in line carving, and create a knife path file is saved to the file as a tool path. Such as the user has ABCDE and many other maps, in fact, are carved in the same piece of material (but the different location of the carving), you can create a knife path file:

- 1) , Check "engrave to file", and select the task for the "layered output."
- 2) , 2) Load the first diagram into the engraving manager and set the engraving parameters such as the positioning and speed of the first figure, and then click "Add Task", the tool path file saving window will pop up, asking the user to save the tool path File (assuming that the tool-path file is saved by the user as A.EGV)
- 3) Load the second figure to the engraving manager, set the positioning, speed and other engraving parameters, click "Add Task" pop-up file save window, then still save as A. EGV, engraving software will A.EGV In the add a layer, then A. EGV has become a two-level knife road document;
- 4) , And so on, all the plans are saved into A. EGV. In this way, the user creates a multilayer toolpath file, AEGV.

In the engraving software, you can directly import the knife path file for engraving. Figure F3-27 shows how to import the toolpath file



F2-17

The main role of using the laser knife path file:

- 1, a ready-made knife road documents, do not understand the use of software, but also can easily complete the sculpture task. For example, workers hired in the factory, the operation is very difficult for the software to get started, then just give him a good knife to the road document, he can complete the sculpture task.
- 2, the knife road document is reusable. Particularly suitable for batch processing. To batch processing or to be processed, and create a knife path file backup is the best way;

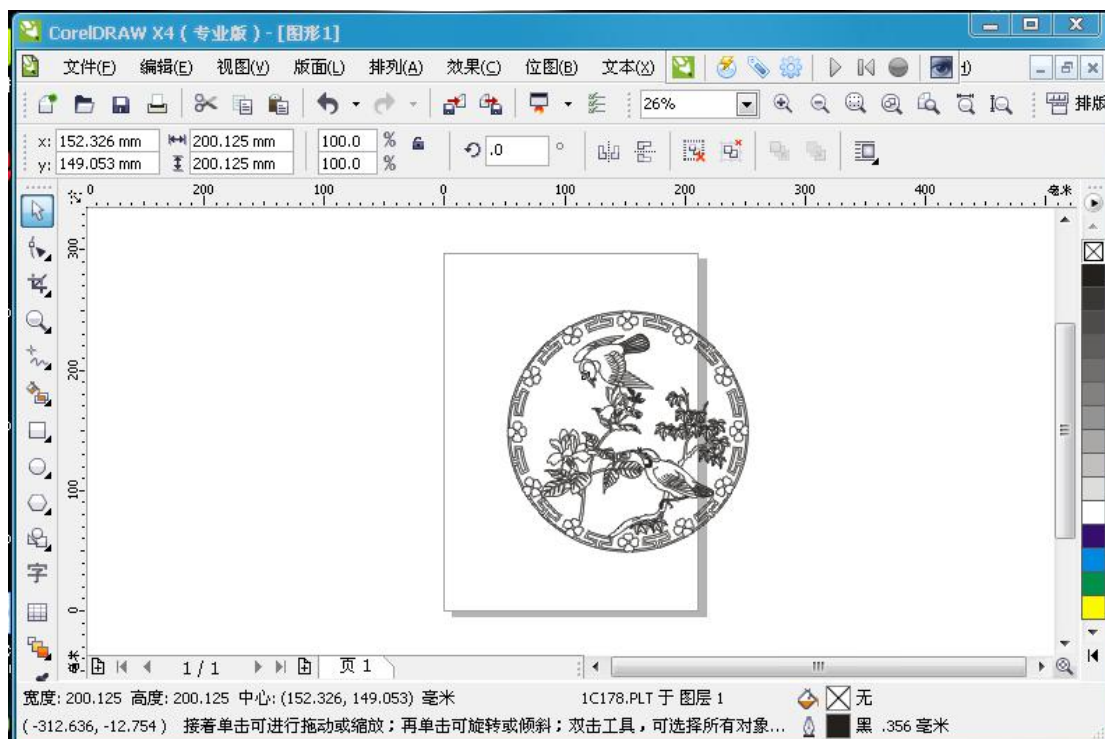
3, the knife path file can be shared.

4, the knife path file can be used as a special file backup.

21. **Reposition:** This function resets the engraver to the origin and recalibrates the positioning Under normal circumstances, the engraving machine software will automatically track the laser engraving machine laser head, but in some cases can not be tracked, such as the user to release the motor, manually move the engraving machine plotter, engraving software can not automatically track this situation , Use the "re-positioning" function, so that laser engraving software to track their own calibration position can be.

2.2 Engraving output

1. In Coreldraw import or lined layout, click on "File" - "Import (Ctrl + I), import the layout you need, as shown in Figure F2-18



F2-18

Adjust the image size to your desired size, click the engraving button, the software pop-up data transfer settings dialog box, select the appropriate settings, click "OK" This will pop-up sculpture manager shown in Figure F2-19



F2-19

At this time, according to the different carving materials, the engraving speed change. And then click the "carving", the engraving machine will receive instructions for carving. Cutting function and engraving function of the practice are basically the same, please refer to carving function settings.

2.3 Advanced application of engraving software

For the user to work in the process, there are carving, cutting at the same time on a piece of material to complete the operation, this section gives details

As shown in Figure F2-20, if the user wants to carve out six pandas, and then carved six panda along the green line cut down:



The first step is to place the position of six pandas, use CorelDRAW group function, the combination of six pandas as a whole, so that the establishment of a six panda carving layer, as shown in Figure F2-21



F2-21

The second step: we draw the line, and draw a good cutting line, but also with CorelDRAW group function, combined into a whole, cut the line thickness set to 0.01mm. This created a cutting layer (two Group: carving layer is a group, the cutting layer is another group), as shown in Figure 6-22 in the six green circle (cutting line does not have to use green color, what color can be)



F2-22

Step 3: Click the button on the CorelLASER plug-in toolbar to enter the CorelDRAW Data Transfer Settings window and set it as shown in Figure F2-23.



F2-23

Step 4: In the CorelDRAW selected "carving layer" that is 6 pandas, and then click the CorelLASER toolbar in the engraving button, enter the laser engraving manager, set the engraving parameters such as: speed, set the location of materials. Then click "Add Task" to send the engraving layer to the laser engraving machine. As shown in Figure F2-24:



F2-24


Note: This section and PLT color separation output layer is different: the color separation is to set the data for each layer, the unified data transmission. Our software is set up a layer of data immediately send a layer. Step 5: Select the "Cut Layer" in CorelDRAW, then click the Cut button in the CorelLASER toolbar to enter the Laser Engraver Manager and send the cutting layer to the laser engraver, as shown in Figure F2-25:



F2-25

Note:

1, if the user to add all the layers, forget to check "and carving", laser engraving machine will not immediately engraved, but out of standby. How to make standby laser engraving

machine into working condition? Click the CorelLASER toolbar  to start button.

2, In WinsealXP, layered engraving method similar with CorelDRAW , the difference is, CorelLASER toolbar has a data transfer settings window, you can set the engraving parameters in advance, and WinsealXP no preset Engraving parameters function, you need to set in the sculpture manager. The above way, a complete demonstration of the CorelDRAW layered carving method.

2.4 Image of the carving process

First, import a photo into CorelDRAW, click "Bitmap" - "Convert to Bitmap" and press

F2-26



F2-26

Set up, export the picture, export the format to Windows Bitmap, and then



open, Click "File" - open the image - select the image you just saved - open - point engraving button - set the engraving speed, positioning and other parameters - point engraving.

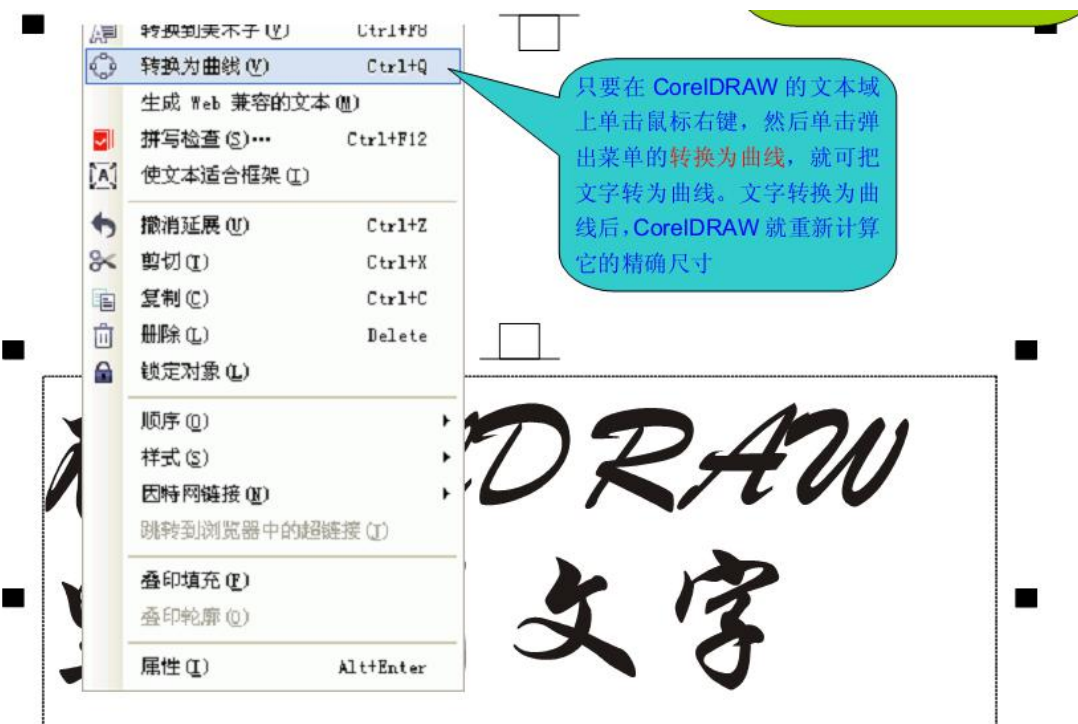
Note: The image engraving, should pay attention to choose incised or engraved, if the material used for carving image is black, laser playing the white, it should be sun carved. If the material is white, the laser playing black, it should be incised. For image engraving, the general speed should not be too fast, because the laser work in RBI mode, engraving machine every step may switch laser, laser power supply response speed may not keep up.

2.5 Engraving text in CorelDRAW

Some users are not familiar with CorelDRAW operations, they are in CorelDRAW carving text, will encounter some trouble. how to complete the text engraving in coreldraw. Simple sentence is: the text can be converted into a curve. As shown in Figure F2-27, F2-28




F2-27



F2-28

3. Position

The machine is now basically equipped with red positioning light, the customer can place the red light according to the location of the carving materials. The specific method is: the upper left corner of the material, you can point the red light. If you need to adjust the positioning point, click inside the sculpture manager up, down, left, right to control the laser head carving position, Normally, the positioning point is set in the upper right corner of the engraving platform, You can also change the position by dragging the graphic on the

right half of the engraving manager as shown  Drag the graphics, carving opportunities will follow, according to their actual needs, set the anchor point, You

can save the parameters as shown 

To set a good point of coordinates (Note: in the engraving machine platform, the coordinates of the mark) after the layout, the direct "extraction parameters" can be.

4.common problems and solutions

1、处理激光雕刻软件侦测到的通讯异常

侦测到激光雕刻机异常，请处理！

1、如果雕刻机的电源没有打开，请打开雕刻机的电源，然后点击[重试]

2、如果雕刻机意外掉线，请拔插一次雕刻机的联机线，然后点击[重试]

3、如果准备取消当前的操作任务，请点击[取消]。

异常代号：0

[重试(R)] [取消]

不要点取消

若显示**异常代号：0**，则说明是激光雕刻机的 **USB** 接口被干扰发生异常，导致激光雕刻机不能接收计算机发送的雕刻数据

出现这两个异常，通常都是 **Windows** 不再和激光雕刻机通讯了，而非主板出了问题。用户可在雕刻时拔掉 **USB** 线，人为制造一次 **Windows** 无法和雕刻机通讯的事件，我们的雕刻软件就会马上检测到。

侦测到激光雕刻机异常，请处理！

1、如果雕刻机的电源没有打开，请打开雕刻机的电源，然后点击[重试]

2、如果雕刻机意外掉线，请拔插一次雕刻机的联机线，然后点击[重试]

3、如果准备取消当前的操作任务，请点击[取消]。

异常代号：1

[重试(R)] [取消]

不要点取消

若显示**异常代号：1**，则说明是计算机的 **USB** 总线被干扰发生异常，导致激光雕刻软件无法发送数据给激光雕刻机

1.Tip: In WinsealXP, we have designed a very reliable USB communication monitoring module, specifically to monitor the communication between computer and USB engraving machine . If the software suddenly pops up any of the above two windows, Then the USB monitoring module in software has been monitoring the abnormalities between computer and engraving machine . At this point, do not point cancellation, just need to pull down the USB cable, and then plug in. Under normal circumstances, The software USB monitoring module will immediately monitor the communication between the computer and

engraving machine , if the monitoring returned to normal, the computer will automatically close the abnormal window, no need to click retry

In particular: If the USB bus is a computer exception, if the bus is more than a USB engraving machine, there are other USB devices, USB bus must be all the USB devices unplug. Otherwise the USB bus may not be able to return to normal, engraving machine will not work. If the user plug the USB cable several times, will still pop up the abnormal window, then there is an unrecoverable exception. At this point the user can turn off the power engraving machine, and then click Cancel the abnormal window, and close the software.

2、 Question: boot does not reset, chaos engraved, dislocation.

Cause: Not grounded or ground wire not connected.

Solution: Connect the ground wire as required.

3、 Problem: The carving depth is uneven.

Reason: water cycle system did not work, the light is not adjusted. Solution: Shut down wait 1 hour, restart the water cycle until the water pipe out of the water, and then turn on dimming.

4、 Problem: There is no voltage on the boot.

Reason: The right side of the machine fuse has been ring.

Solution: Replace the spare fuse.

5、 Problem: Engraving depth is too shallow.

Cause: The laser beam is not in the center of the lens or the lens is dirty.

Solution: adjust the laser light path, clean the lens.

6、 Problem: Blurred lettering.

Reason: the lens is not anti-or focal length.

Solution: the lens is placed correctly, adjust to the specified focal length.

7、 Problem: machine discharge, ignition.

Reason: Wiring is not good or the air is too wet The terminal has dust.

Solution: connect the ground, clean up dust, ventilation and dry.

★If there are other problems, please call the company's technical service hot line or email us.