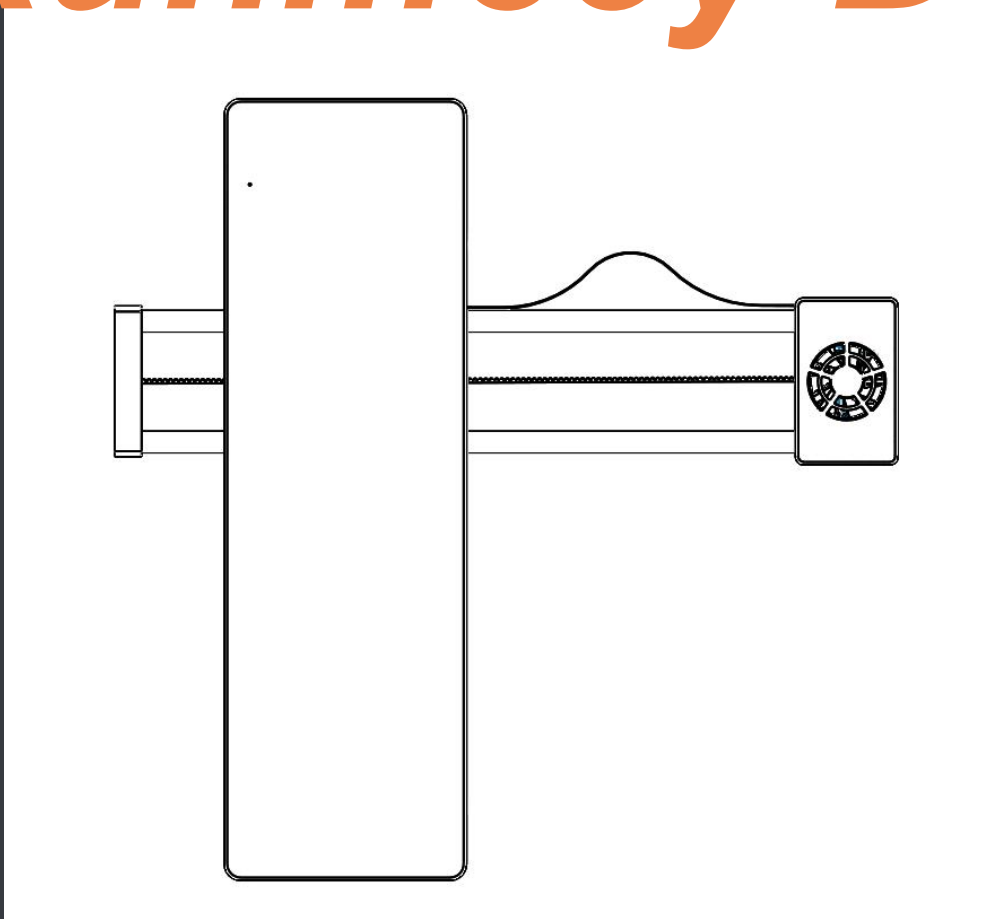


Runmecy D4



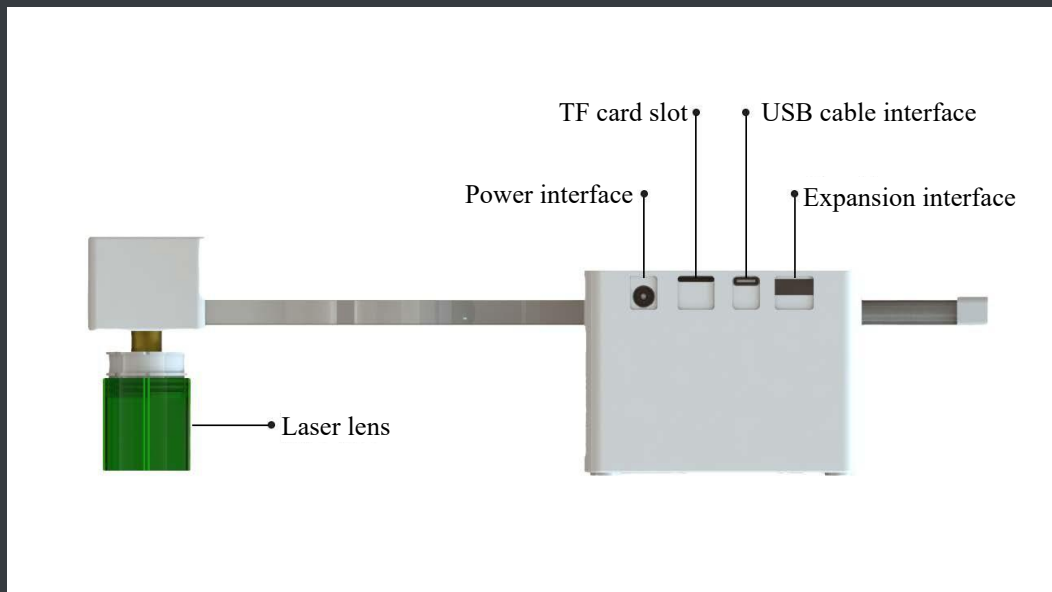
Operating Instructions of Runmecy D4

Prior to use, please read this operating instructions carefully and keep it properly for further reference.

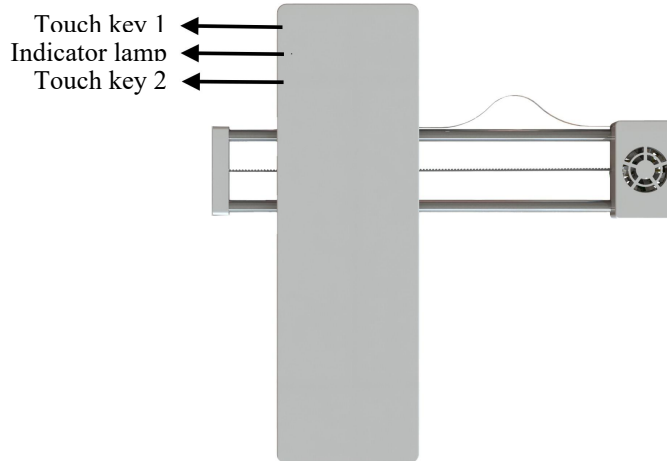
Operating Instructions of Runmecy D4

I. Overview

1. Composition of Runmecy D4



- Power interface: Connect power supply so as to supply power for the product.
- USB cable interface: Connect computer to transmit data and control the product via computer.
- Laser lens: A focusing device, which is used to make laser focus on the engraved material so as to realize a better engraving effect.
- TF card slot: Interface of TF card.
- Expansion interface: Connect the interface of external devices such as roller



- Touch key 1: Long press it for 3 s under non-printing mode for homing
- Touch key 2: Offline printing key

Touch Mode	Key Functions
Click	Position based on the contents of TF card
Long press	Enter printing mode and start to print

Current Printing Mode and Touch Mode	Enter printing mode
Printing + click	Pause printing
Printing + long press	Stop printing and exit printing mode
Pause + click	Continue to print

- Indicator lamp: Indicate the status of wireless connection

Color of Indicator Lamp	Connection Mode
Green	Indicator lamp of touch key
White	Network connection

Color of Indicator Lamp	Connection Mode
Flashing of white lamp 1Hz	WiFi will be connected
Flashing of white lamp 3Hz	WiFi or hot link has been connected but the product is not connected with software
Flashing of white lamp 5Hz	The product has been connected with software with which, the product can be operated
Green indicator lamp is on	Touch key

II. How to Use

1. Connect software

Connection mode 1 (wire):

1. Connect one end of the manufacturer's USB cable with the USB connector of the product and the other end with the USB connector of computer.
2. Start the computer to operate software and click connect button for connection.

Connection mode 2 (hot link):

1. Set and open the hot link of mobile phone or computer (hot link name: "vm"; password: "11110000")
2. Turn on the power supply of the product and start the software to wait for connection.

Connection mode 3 (WiFi):

1. Turn on the power supply of the product.
2. Find the WiFi connection list of mobile phone or computer.
3. Choose network "voidMicro_####" (such as "voidMicro_1234") for network connection.
4. Start operating software for connecting the product.

Connection mode 4 (WiFi router):

1. Connect the product via hot link or in a wire mode.
2. Start the software to set the name and password of WiFi to be connected.
3. Start the software for connecting the product after connecting mobile phone or computer with the WiFi to be connected.

2. Adjustment of focus length

Rotate the laser lens to minimize the laser spot.



3. Offline printing

1. Import GCode to TF card and insert it into the product.
2. Click Touch key 2 for positioning.
3. Long press Touch key 2 to enter printing mode and start printing.

Switch of printing mode

Current Printing Mode and Touch Mode of Touch Key 2	Enter printing mode
Printing + click	Pause printing
Printing + long press	Stop printing and exit printing mode
Pause + click	Continue to print

III. Attentions

1. Safety precautions

1. Do not illuminate human body or animal eyes directly to avoid eye injury!
2. Do not illuminate human body, animal, clothes, valuable objects, etc. to avoid any injury or damage!
3. Do not use the product by children or those with no operational ability!
4. Do not use the product where there're inflammable and explosive articles or combustible gas to avoid fire disaster or explosion!
5. Do not stare at the laser focus while engraving. Please wear protective goggles prior to operation, where necessary!
6. Do not see the focus for a long time during engraving. Please wear protective goggles, where necessary!
7. Turn off the power supply when the product is not used.

2. Engraving instructions

1. Set a distance between laser head and material at 30 mm-50 mm (the distance for fixed-focus product is 13 mm).
2. Check if focusing is accurate prior to engraving!
3. The product can work for a long time theoretically. For the purpose of protecting laser head and extending its service life, you're suggested to stop it for 2 min after working for 2 hrs.
4. For any doubt, please feel free to contact our customer service specialist (contact mode) or send us an email via "Contact Us" on the webpage.

IV. Maintenance

1. Please do not use the product in an environment with humidity/high temperature.
2. Please do not touch or operate the product with wet hands.
3. Please wipe the lens of the product using cotton swab dipped with alcohol at regular intervals to protect the lens.

V. Contact Us

1. Company name: Dongguan Chuangkongjian Science & Technology Co., Ltd.
2. Address: Room 326, Building 2, No. 5, Longxi Road, Nancheng Sub-district, Dongguan City, Guangdong Province, China
3. Email: official@mr-carve.com

Appendix

Reference parameters (for reference only. Test is required before determining the specific data)

Items	Power	Speed (mm/s)
Wood engraving	100%	80
Paper	100%	90
Leather	100%	80
Plastic	100%	90
Metal lacquer	100%	50
Stainless steel	100%	5-10
Wood chip cutting (within 2 mm)	100%	5
Paper cutting (within 2 mm)	100%	20
Cutting of black plastic chip (within 1 mm)	100%	10
Leather cutting (within 1 mm)	100%	20

Note: The data above are for reference only. The specific data are determined based on the specific equipment model and the engraving and cutting materials. Printing effect may vary under different data. Please carry out a test in order to determine the most suitable data for your product.

About Software

I. Introduction

The software can be used for operating engraver based on visual operation mode in order to finish engraving. Different engraving and printing modes are also available to enrich the elements and aesthetic feelings of your work.

II. Software Installation

Windows

1. Download the latest software package
2. Click “Next” after choosing the position of installation
3. Click “I accept” and then click “Next”
4. Wait until installation is finished

Mac

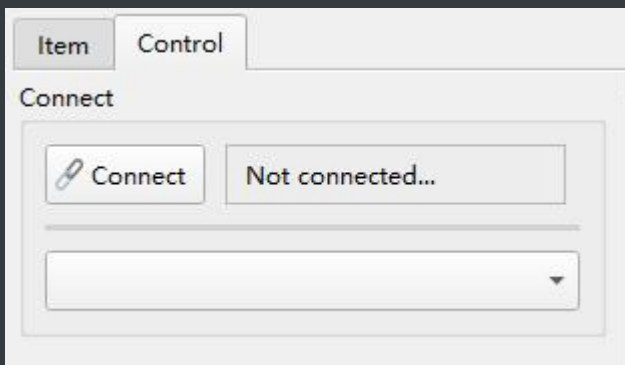
1. Download VoidMicroMac.zip and decompress it.
2. Double click VoidMicro.dmg and open VoidMicro disk



3. Drag VoidMicro.app to the application program folder

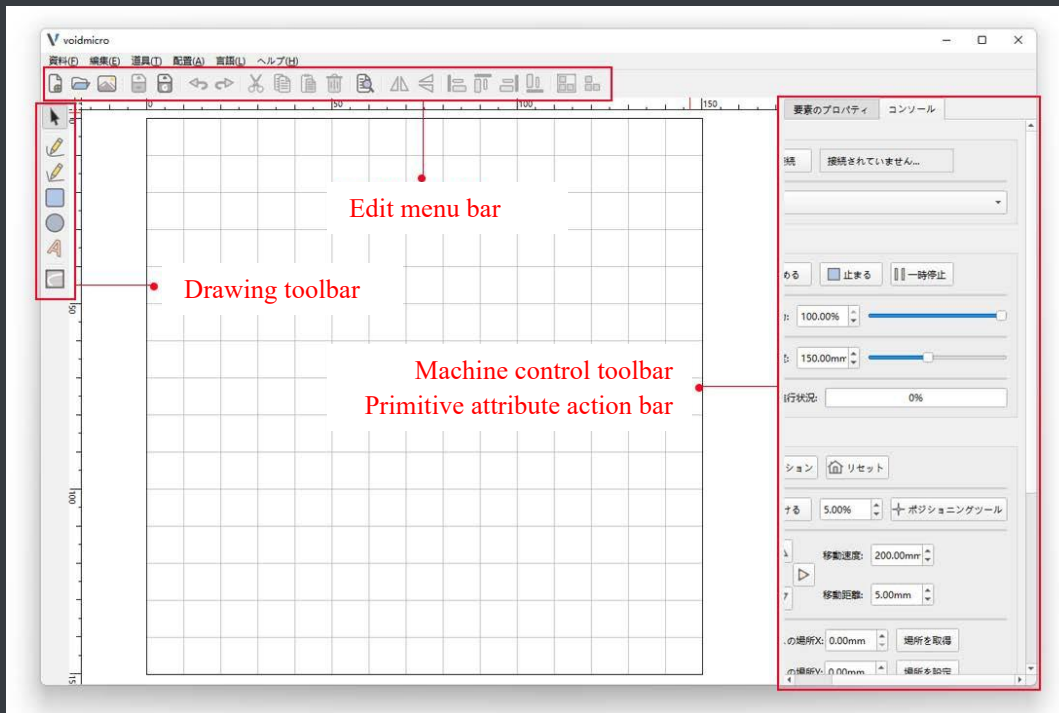


III. Link the Product




Insert power supply to connect USB cable and click "Link" button to link the product automatically

IV. Introduction to Software Interface



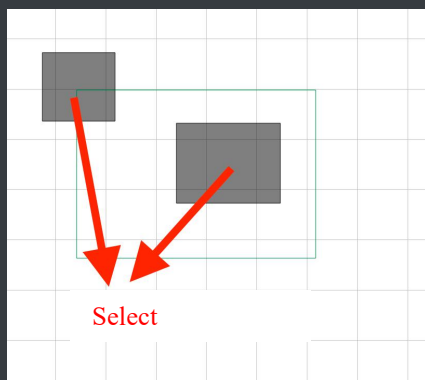
1. Canvas

1. Click to choose primitive

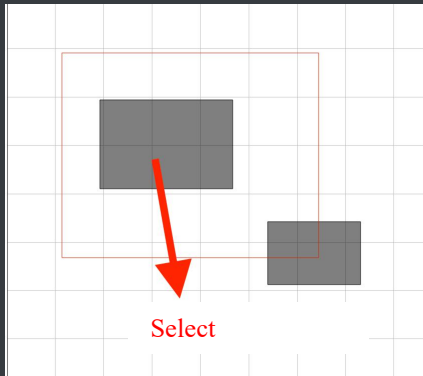
Click  and then click the primitive required

2. Drag to choose primitive

Press the left key of mouse to drag the mouse upward in order to select the elements contacting or included in the green square



Press the right key of mouse to drag the mouse downward to select the elements included in the red square



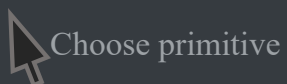
3. Move canvas

Press the right key of mouse to drag the mouse upward in order to drag the canvas

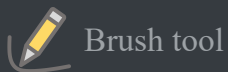
4. Zoom canvas

Roll the mouse wheel in order to zoom the canvas

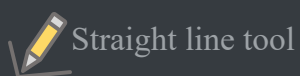
2. Drawing toolbar



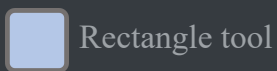
Choose the primitive on canvas by clicking after clicking this tool in order to modify primitive attribute



Drag the left key on canvas after clicking the tool in order to draw a curve



Click the left key on canvas after clicking this tool to draw a straight line. Click the right key to cancel drawing.




Drag the left key on canvas after clicking the tool in order to draw a rectangle



Drag the left key on canvas after clicking the tool in order to draw an ellipse


 Letter tool

Drag the left key on canvas after clicking this tool in order to write some words


 Picture edge tool

Click the tool after selecting the picture to extract picture edge for the purpose of cutting


3. Edition toolbar

 Create a project


Create a new empty project

 Open a project


Open the saved project or SVG file

 Add a picture


Add a picture (the same effect can be realized by dragging a picture to the canvas)

 Save a project

Save the elements on the canvas as a project

 Save Gcode


Generate the elements on the canvas into GCode and save GCode

 Withdraw

Withdraw the operation of last step

 Redo

Undo/redo

 Duplicate


Duplicate selected elements

 Paste

Paste duplicated elements

 Delete


Delete selected elements

 View preview

View printing preview

 Vertical mirror

Make selected elements into a mirror
along vertical direction

 Horizontal mirror

Make selected elements into a mirror
along horizontal direction

 Justify left

Justify left the selected elements

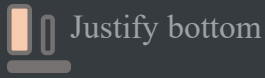
 Justify top

Justify upward the selected elements



Justify right

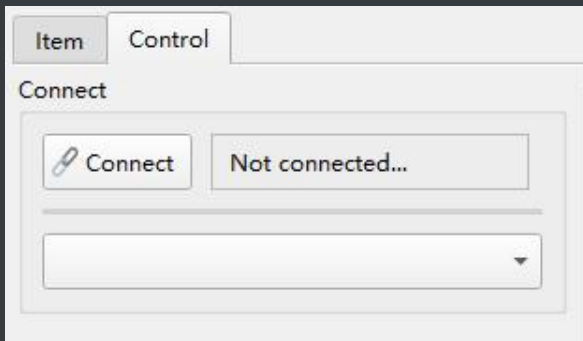
Justify right the selected elements



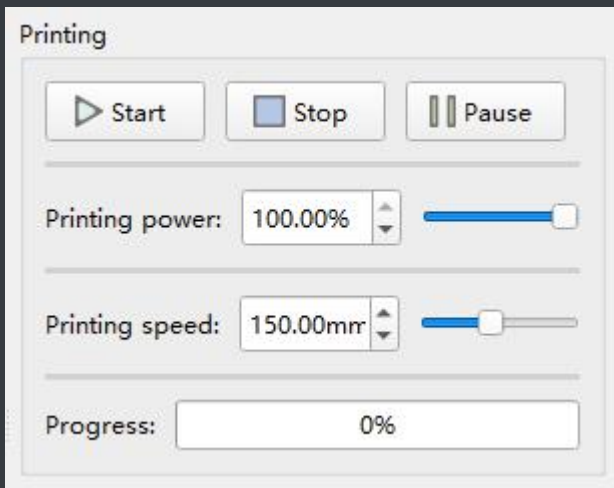
Justify bottom

Justify downward the selected elements

4. Machine control toolbar



1. Click “Link” button to connect the product
2. Use drop-down bar to select serial port No.



1. Click “Start” button to start printing
2. Click “Stop” button to stop printing
3. Click “Pause” button to pause printing
4. Set the max. printing power via “printing power”
5. Set the max. printing speed via “printing speed”

Move

Speed:

Distance:

Location X:

Location Y:

1. Click the frame positioning button and the laser will move for once along the max. external rectangle of the printed contents
2. Click "Reset" button and the laser will return to the original point
3. Click "Turn on laser" button to light laser and then set laser brightness
4. Click the four direction buttons to move laser to the corresponding direction and set the moving speed after finishing setting the speed
5. Click "Position setting" button and the laser will move towards the position set
6. Click "Position setting" button to obtain the present location of laser

Settings

Width:
 Height:

Max speed X:
 Y:

Acc X:
 Y:



1. Width and height: Set canvas size
2. Max. speed: The max. speed of laser moving (the printing speed should be smaller than this value)
3. Acceleration: Acceleration when laser moves at a faster or slower speed
4. Hardware updating: Monitor updated hardware

5. Primitive attribute action bar

Translate

Loc X: 54.055mm Loc Y: 51.476mm

Width: 51.120mm Height: 17.040mm

Rotate: 0.0°  

1. Position, width and height: Position and size of selected primitive
2. Rotation: Set the rotation angle relative to the current position

Print

Print mode: Filling

Scan times: 1

Scan accuracy: 0.0250mm

Scan angle: 180°

Scan error: -0.20mm

Over-scanning: 4.0% 6mm

Scan power: 100% 100%

Scan speed: 100% 150mm/s

1. Printing mode

Filling: Scan the overall image

Edge: Cut image edge

2. Scanning times: Printing times of primitive selected at present
3. Scanning line spacing: Spacing of each scanning line when printing the primitive selected at present
4. Scanning error: Scanning compensation when printing the primitive selected at present (no adjustment required)
5. Scanning buffer: Buffer distance for line change when printing the primitive selected at present (a too short distance will lead to shaking)
6. Scanning power: Ratio of printing power of the primitive selected at present in the set printing power
7. Scanning speed: Ratio of printing speed of the primitive selected at present in the set printing speed

V. Basic Software Operation

1. Drag one picture
2. Set the printing size and position
3. Click frame positioning button in machine control toolbar to position the picture in the material printing position
4. Set printing speed and power
5. Click “Start” button to start printing

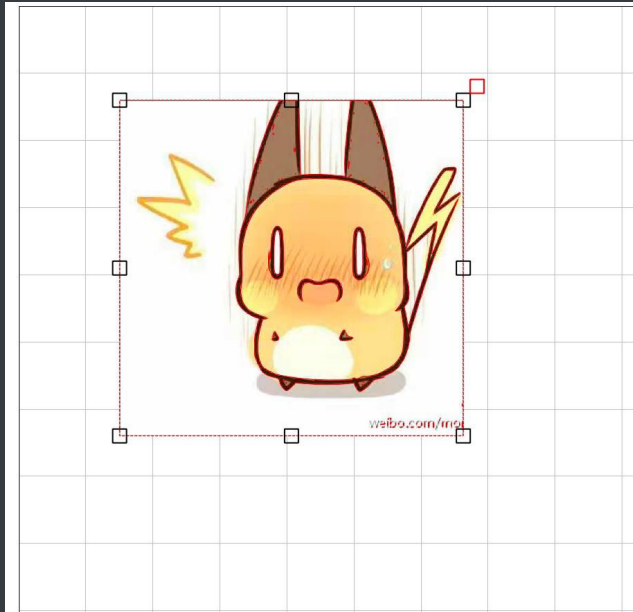
VI. Picture Printing Mode and Picture Cutting

Printing mode

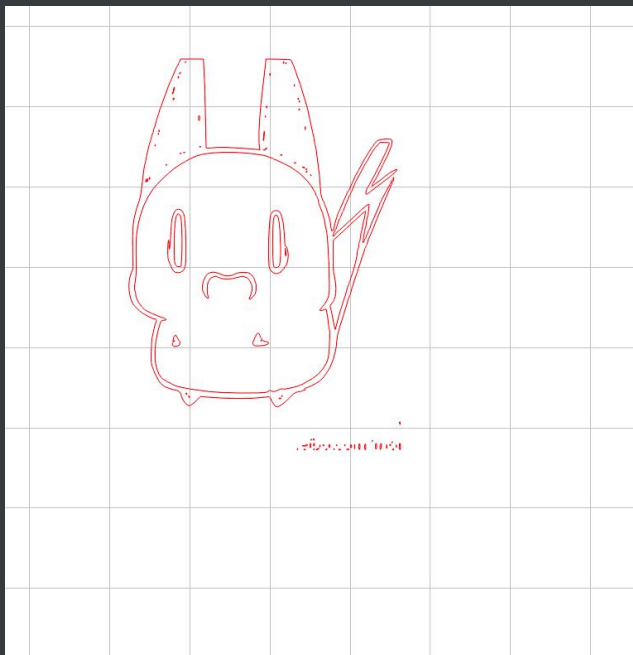
1. Threshold value: White and black picture
2. Halftone: Display the effect of gray level by point density
3. Gray level: Print the effect of gray level by laser power change

Picture cutting step

1. Select a picture
2. Click picture edge tool  to generate edge picture source



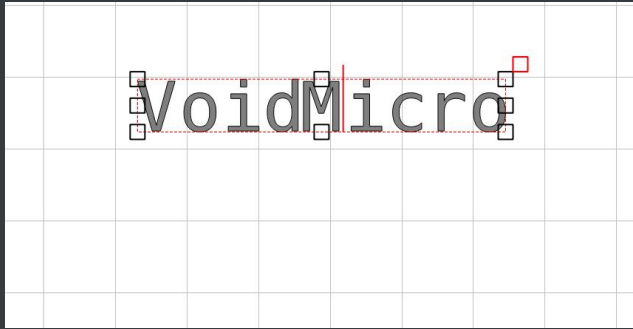
3. Cut the picture according to the edge picture source generated



VII. Settings of Words and Parameters

Enter words

Enter the modified words by double clicking word picture source after adding words



Parameters

Character

宋体

Font style: None

Font direction: horizontal

Font Align: Align left

Word space: 3

Line space: 5

1. Font
2. Style: Italic or general style
3. Direction: Vertical or horizontal display
4. Justification: Right or left justification or centering
5. Spacing: Spacing between two words
6. Line spacing: Spacing between two lines of words