

A

USER MANUAL

AMEIDA Digital Cutting Machine - B4 series



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1 Working Environment Instructions

This equipment is a mechanical and electrical products in precision, need to be carefully maintained, to prevent unnecessary failure due to not well maintenance or correct operation. Correct maintenance can prolong the useful life. Detailed requirements as following:

- ❖ This device should be placed on a dry flat ground, size of the field at 6m*4m; Avoid to put somewhere surrounding by corrosive gases, liquids, water droplets, vapor, oily dust, flammable, explosive gas, floating dust or metal more.
- ❖ Prepare power supply in advance, detailed requirements as following:
 - (1). One three-phase alternating current 380V can supply one 10KW machine use alone, one AV 220V power can supply the computer and compressor use.
 - (2). The power connecting machine must be installed to the ground wire to prevent static interference, otherwise may destroy machine and interface, and we are not responsible for the consequence caused by.
 - (3). Avoid to use with other high-power or electrical interference in the same power in order to maintain the stability of power supply.
- ❖ Air supply with minimum inflation point at 0.6MPa, air cylinder at 30L, and with drying filter system on. The air supply not stable will cause a high-speed warning of Universal Router Tool, and affect the precision of roll materials cutting.
- ❖ The outer environment of the place meet conditions below:
 - (1). Location placement should be no heat source, electrostatic, strong magnetic, so as not to interfere with data transmission and reception.
 - (2). Temperature of location should be in the range of 5°C - 40°C.
 - (3). Humidity of location should be in the range of 1% -60%.
 - (4). It should not expose to direct sunlight, otherwise the surface of cutting table will crack or arch leading to the uneven table, which will impact the cutting performance and using life.
 - (5). The weight of the machine is about 1.5t, please unloading and transportation by forklift is required.
 - (6). Our product using the camera positioning system, so the light should be appropriate.

2 Exterior structure

Before installation, please first check all component. If the component leakage or broken, please contact with us.

2-1. Cutting machine consists of 5 parts as below:

Cutting table

Operation desk

Suction system

Anti-drying System (For conveyor table);

Accessories

2-1-1. Cutting table contains:

Head of machine

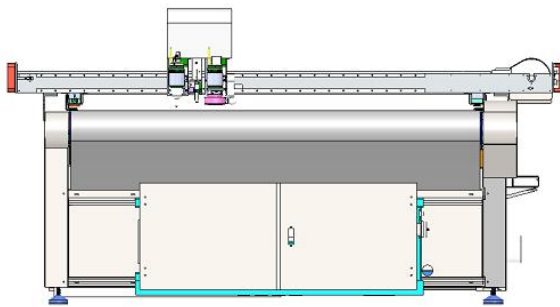
Beam

Working table

Electrical box

Feeding system (For conveyor table)

etc.



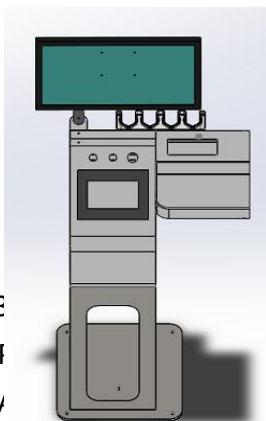
2-1-2. Operation desk contains:

Touch screen

Desk for computer,

Tools shelf,

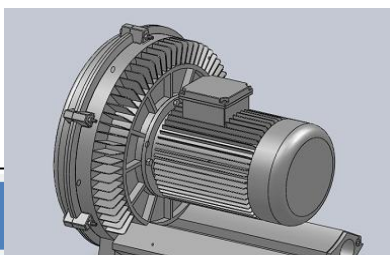
Control switches (3pcs)



2-1-3. Suction system contains:

1. Motor

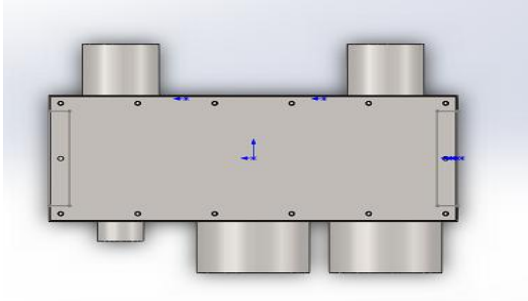
(supply vacuum suction during machine working)



2-1-4. Anti-drying System contains:

Pipes (2pcs, 3m length)

A Black box with piston structure



2-1-5. Accessories contain:

Accessories box

Cutting tools box

Touch screen box



2-2. Packages - Two types:

2-2-1. Direct delivery by freight car:

Direct delivery by freight car, check if any leakage on the car, and check if any broken or scratch. If there is any problem, please contact us.

2-2-2. Packed with international standard wooden case and send by logistics:

The machine is packed in wooden cases, Please check the quantity of cases, and check whether the cases are damaged before signing for it. If there are damaged or missing parts, please contact us in time, and you can refuse to sign.

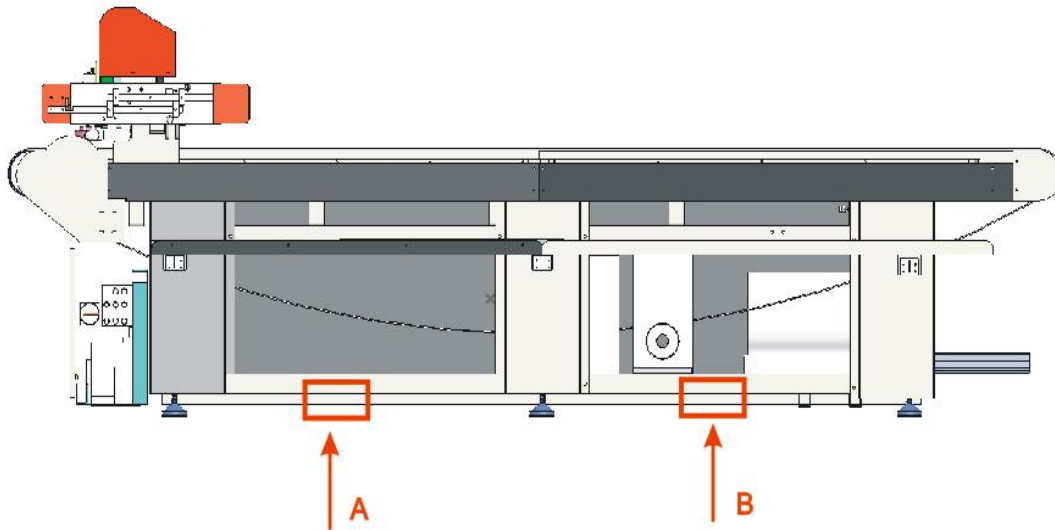
3 Installation Instructions

3-1. Unpackage and Transporting precaution

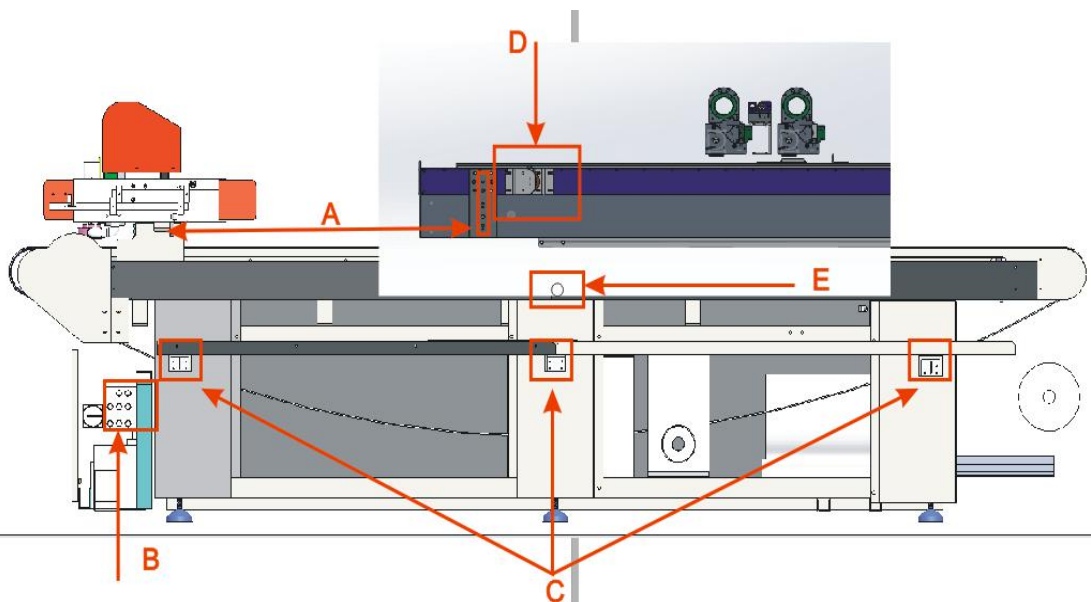
- ❖ Please place the device on a flat ground, and unpack the wooden case, the operator should wear protective gloves to avoid scratching when dismantling packaging;
- ❖ Remove the 4 black long screws fixing in the bottom of machine (as below picture);



- ❖ Lift the device from the wooden frame by forklift, and put on the A and B place as below picture. Please place the arm of forklift in the middle of the machine, then across the bottom of the entire machine;



- ❖ If the place is on the first floor, the door width is wider than 2.3m, and the floor is flat and has no threshold, then you can push the entire machine in directly (lift the foots and use the wheels)
- ❖ If the place with threshold or on second floor or higher, have to remove the beam as below:
 - If the width of the door or window is more than 2500MM(2300+200MM), the length of window is more than 1500MM(1200+300MM), you can lift the whole device.
 - If the door or window are small, while bigger than 2200*1200, you can choose to remove the beam and drop-out line, as shown below:



As shown A on picture above, remove three screw on beam clamp;

As shown B on picture above, remove the wires of motor, encoder and aviation plug;

As shown C on picture above, remove the screw fixing trunking, remove the trunking and the shelf fixing it together;

As shown D on picture above, depart the woolen felt from the folder felt cylinder;

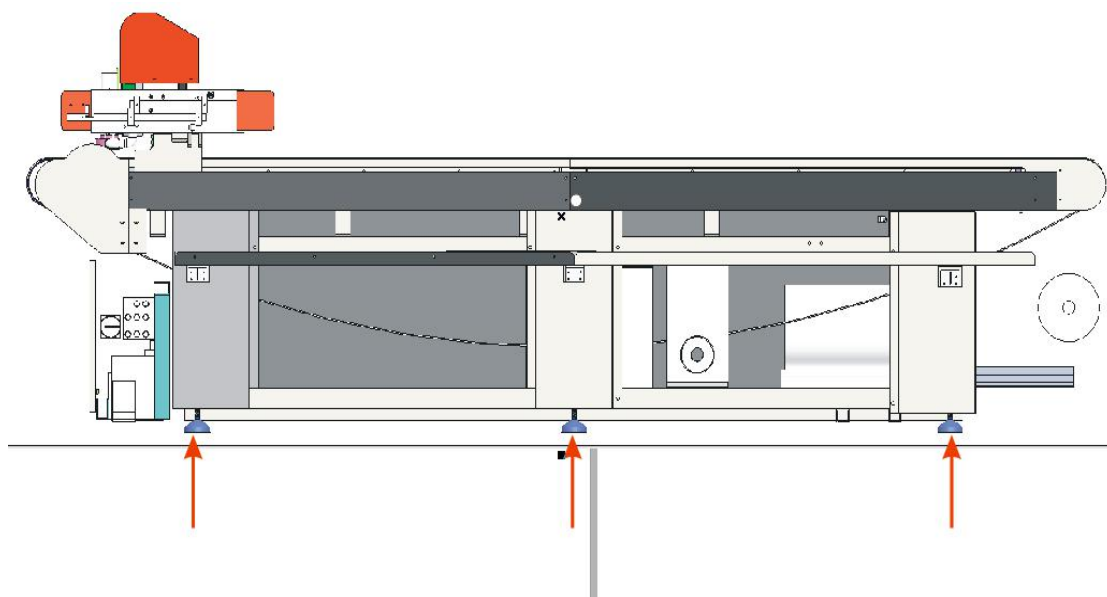
As shown E on picture above, remove the roller which protect the trunking.

Lift the device after remove above parts.

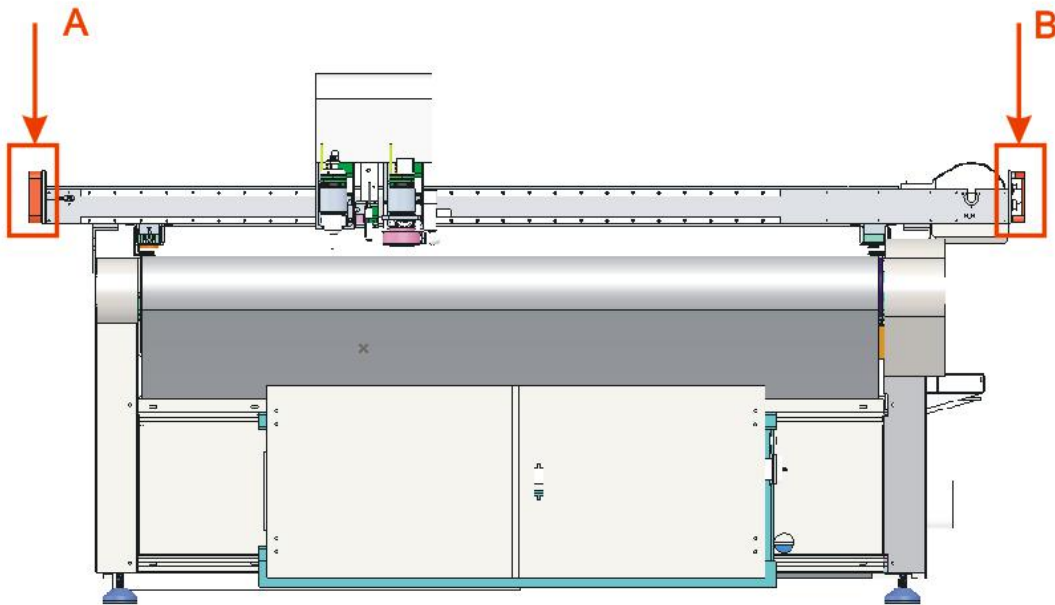
If the windowsill is high, use the forklift to lift inside the windowsill, need several people to carry and pull inside, under safe construction.

3-2. Machine Installation Instructions

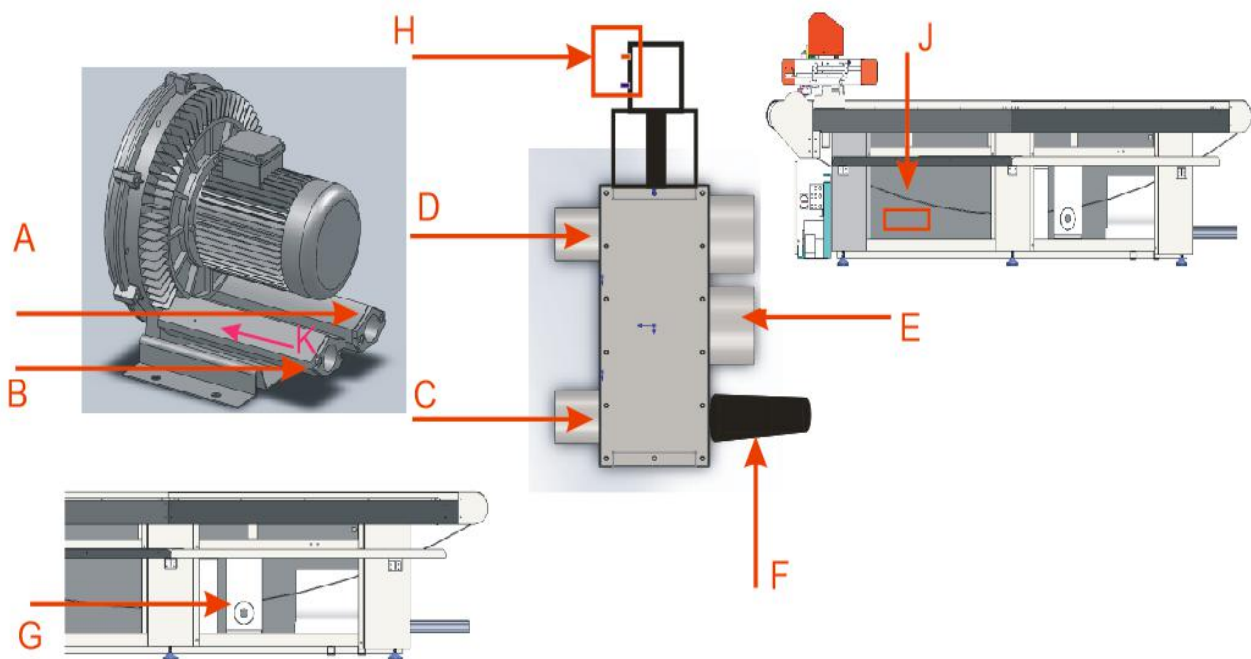
3-2-1. Fix the device: move the device to the appointed place, fixing the whole table to ensure the stability of running machine and cutting precision. Fix the six foot screws around the machine tightly, as shown below:



3-2-2. Install Infrared sensing system: We will remove the Infrared sensing system if the device packed in wooden case, so we need to install the Infrared sensing system first. Notice that the quantity of plug-in unit is different each side, please don't mix them.



3-2-3. Install anti-drying and suction system (If the air pump of your device is built-in, you can ignore this step), as shown below:



First, fix the air pump on horizontal position. Connect A and D, B and C, E and G with hose clamps. Connect H and J (magnet valve) with 6mm gas pipe, location F to install pressure limiting valve, and K is the inlet of air pump.

3-2-4. Power cable connection: as below



Please connect the power line of air pump to K.

C is the drive of direction X;

D is the drive of direction Y;

E is the drive of direction Z;

F is the drive of direction U;

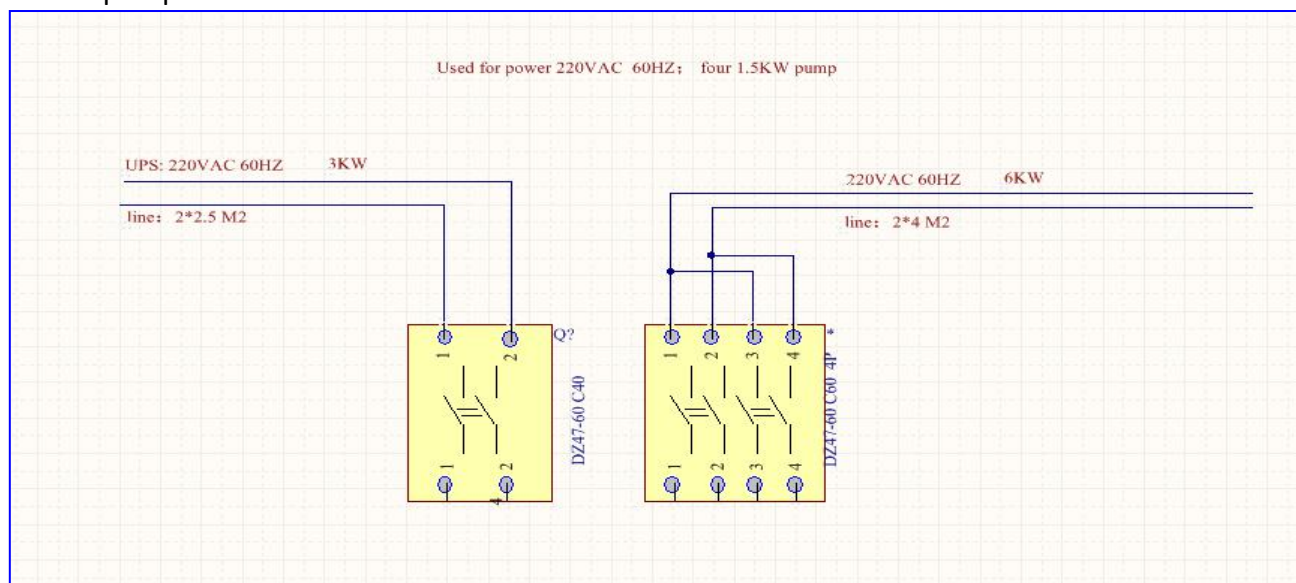
G is the drive of direction Z1;

H is the drive of direction U1;

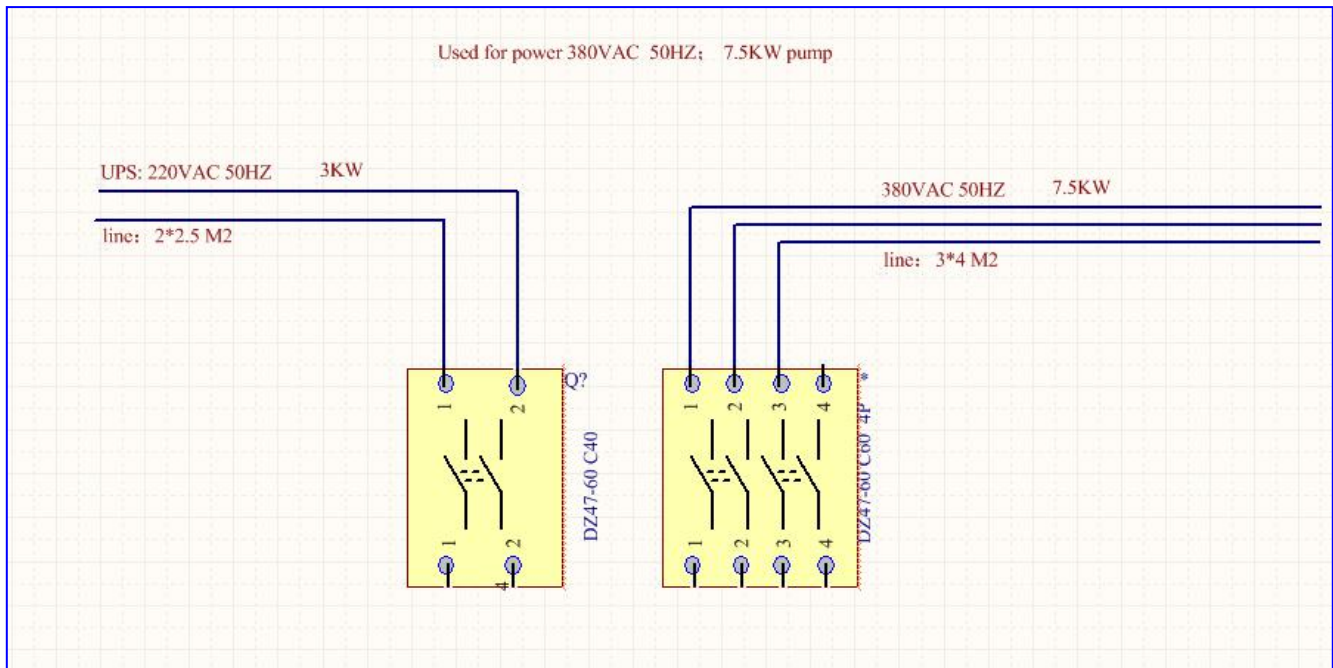
L is the place ground line connector;

A is 2P air switch of the machine supplier, please connect to power supply 220V with duplex cable we supply. B is 4P air switch of air pump supplier, please connect to power supply 380V with triple cable we supply. Details as below:

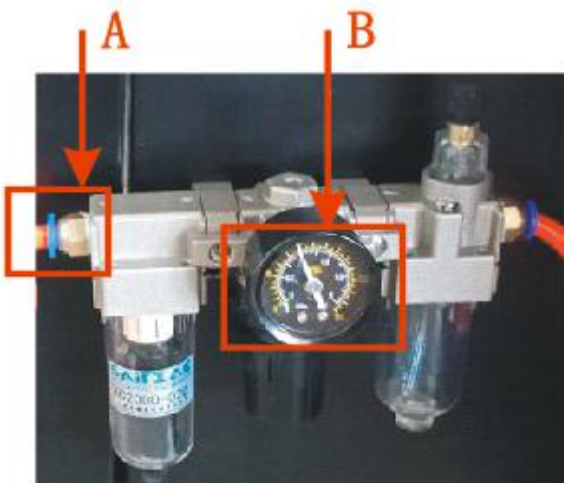
1.5KW pump:



7.5KW pump:

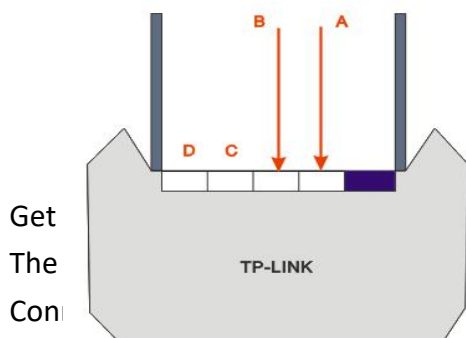


3-2-5. Connect with air supply:



Connect with 8mm diameter air pipe with air supply at location A, the air supply need to be stable at 0.6-0.7Mpa, the value can see on location B.

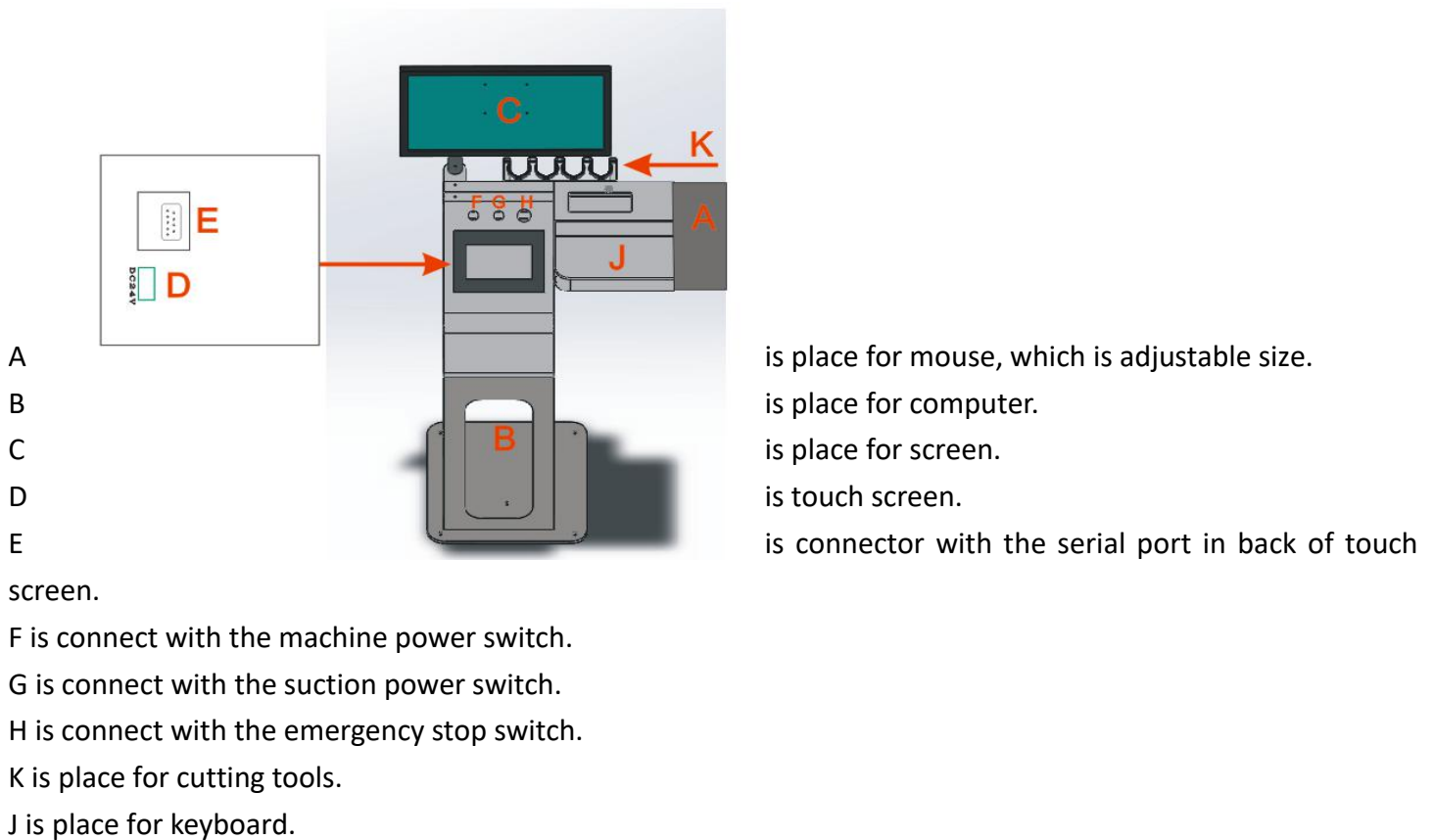
3-2-6. Internet cable connection:



Get
The
Con

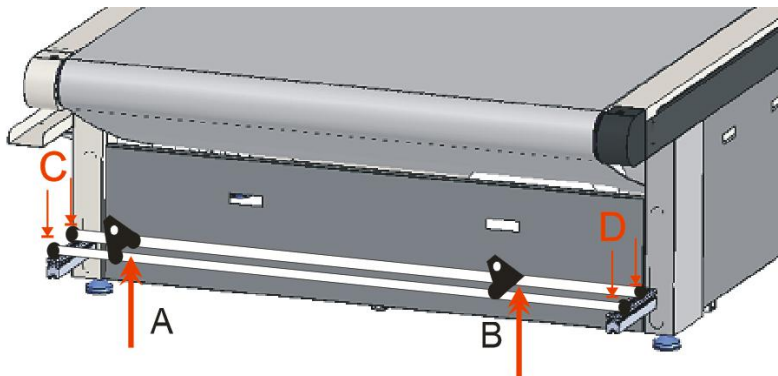
isory box, one port connect to PC, the other side connect to router C or D.
B is for camera.
A to the port on system board. Factory default IP is 192.168.0.250.

3-2-7. Operation desk install instructions



3-2-8. Carriage install

A is black support bar on left.
 B is black support bar on right. The carriage support bar can adjust the transmission damping, to avoid the materials rolling deviation. Location C&D fixed with screw.



4 Software Installation



CCD软件



相机驱动软件



设计软件

We need to install 3 software for B4 series machine, which are CCD positioning software, camera driver software and design software.

The installation sequence is:

- (1) Camera driver software,
- (2) CCD positioning software,
- (3) Design software.

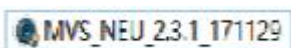
Remark: The computer system requires win7 32-bit or more. Connect the USB disk in the tool box to the computer, copy all the data in the USB disk to the computer, exit the antivirus software, close the network firewall, and set the number separator in the computer operating system to ".".

camera driver software installation and setup

There are two versions of the software, old one (Basler) and new one (Corence), please pay attention to the distinction, the following takes the new version (Corence) as an example



4-1-1. Install "camera driver software"



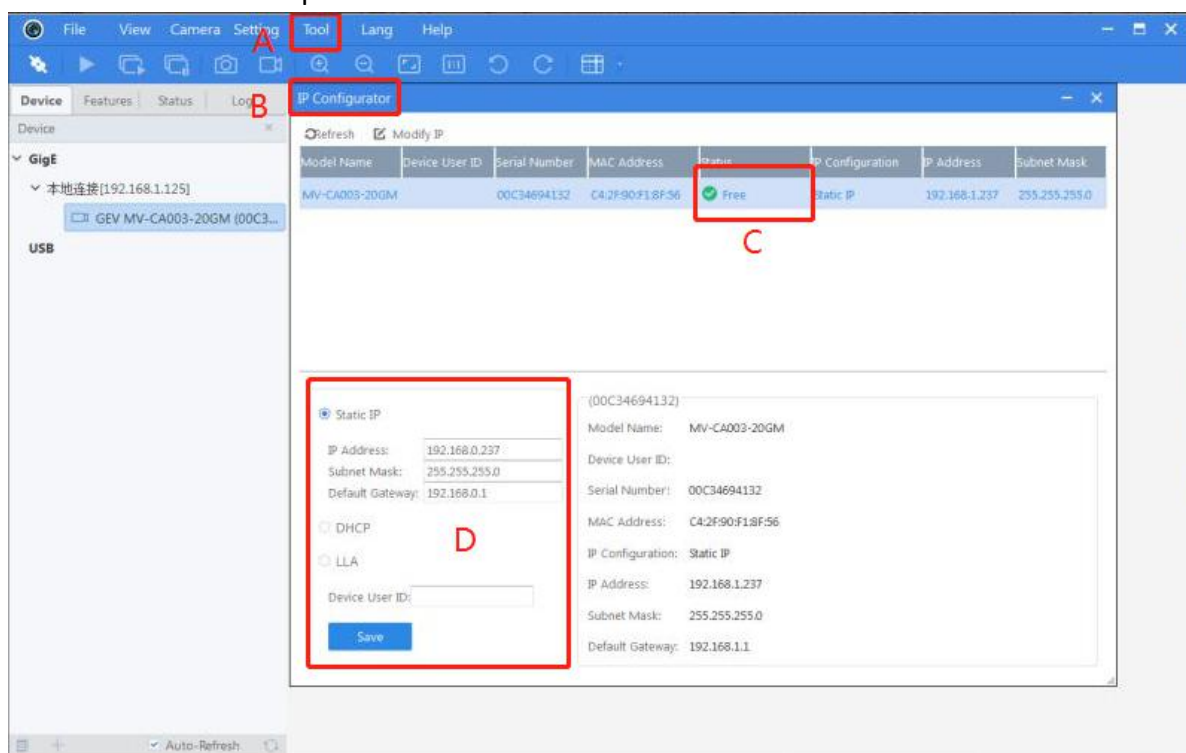
Double-click to open the camera driver and follow the prompts to install it.

AB is the language option, A is Chinese and B is English. C chooses the developer. The camera connection interface needs to select the network cable at D. F is the installation directory. It is recommended to select the default directory.

Click to start the installation, wait for about 5 minutes to complete, if there is a prompt that the system file is missing, you need to download and install.



4-1-1-1. Parameter setup

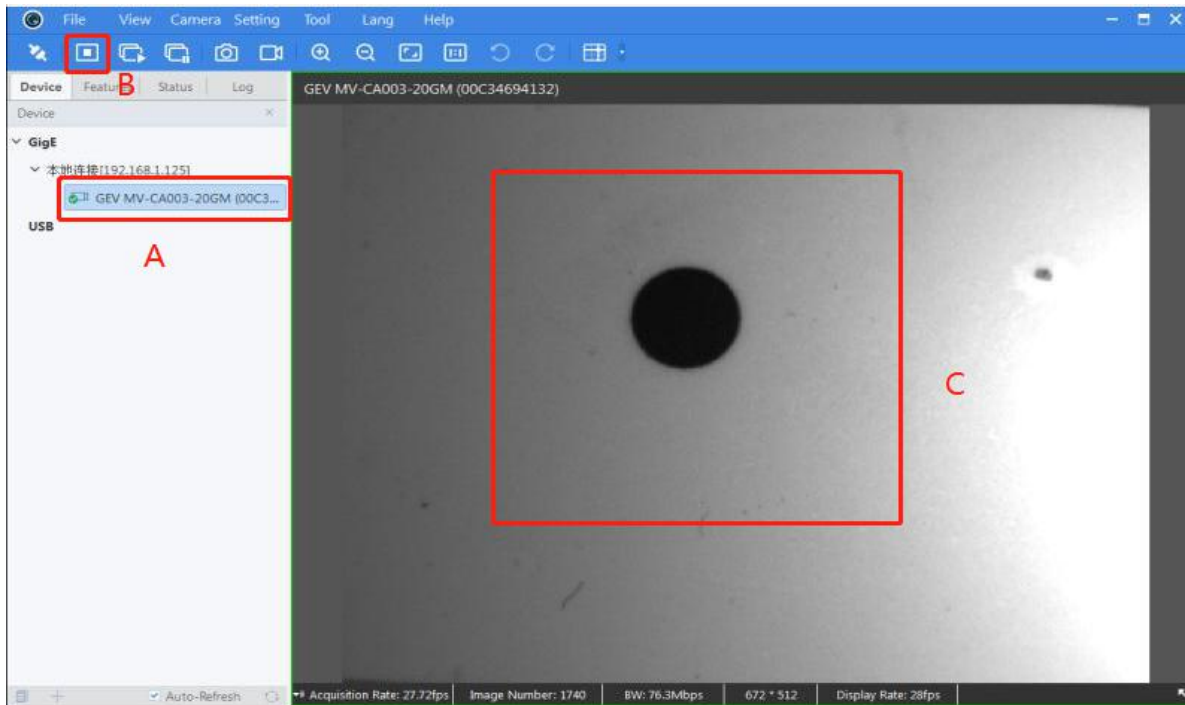


Click the A location to select the IP configuration tool at the B location.

Check the connection status of the camera at the C position, if it is \checkmark , it means that it is connected, \times means it is not connected to the computer and the machine.

D position Select static IP setting, fix the camera IP address to make the camera connection more stable. Note that the camera IP, machine IP, and computer IP must be on the same network segment. For example: the machine default IP is 192.168.0.250, then the camera IP needs to be set to 192.168.0.249, and the computer IP can be set to 192.168.0.248.

4-1-1-2. Check camera in camera driver software



A: Camera connection display, B: Camera switch, C: Camera display window

Double-click the A position and then click the B position to open the camera, and see the camera shooting area at the C position. By adjusting the camera's focal length and exposure to achieve the best clarity of shooting.



1 position adjusts the camera focal length, 2 position adjusts the camera exposure. Note: The light placed in the environment of the device has a great impact on the camera recognition, so the ambient light source needs to be uniform.

Loosen the fixing screw before adjusting the camera, and tighten the fixing screw after adjustment.

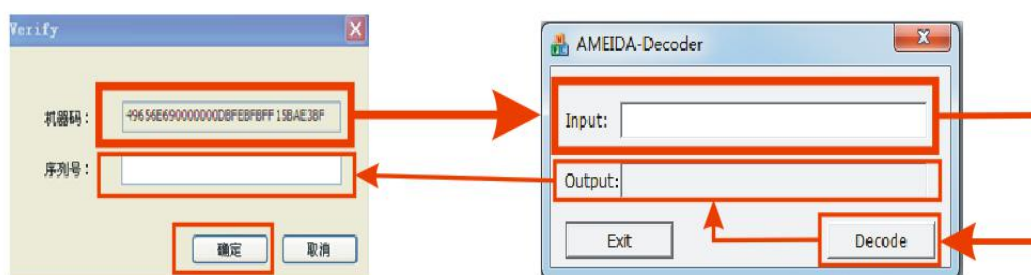
4-1-2. Install "CCD positioning software"

4-1-2-1. Software installation:

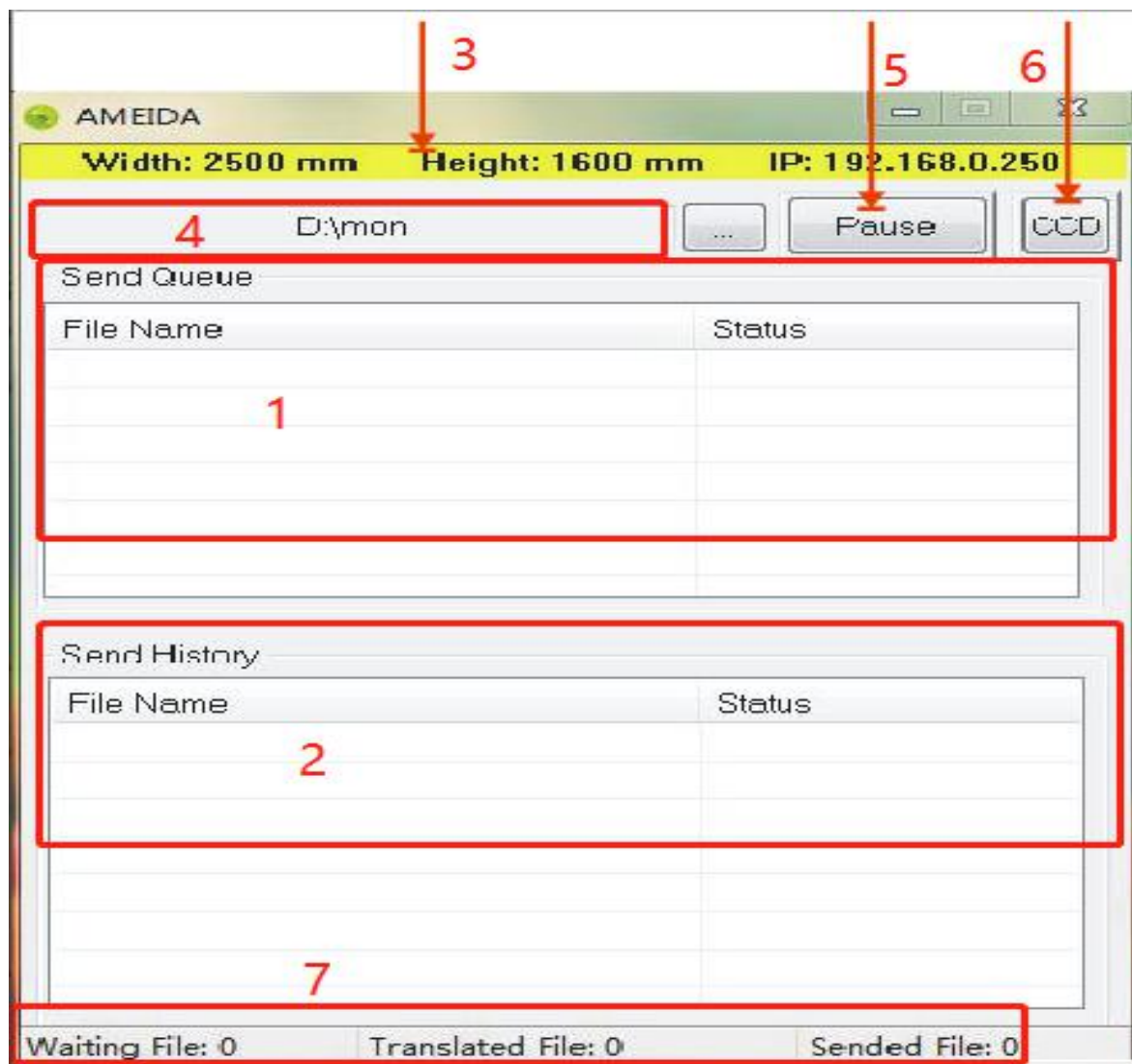


Please install in the order in 1 - 2 - 3 - 4. If the system prompts that the Windows system is missing a plug-in during the installation, please install it according to the requirements.

The interface that needs to be decrypted may appear for the first time, you can refer to the following figure to decrypt:

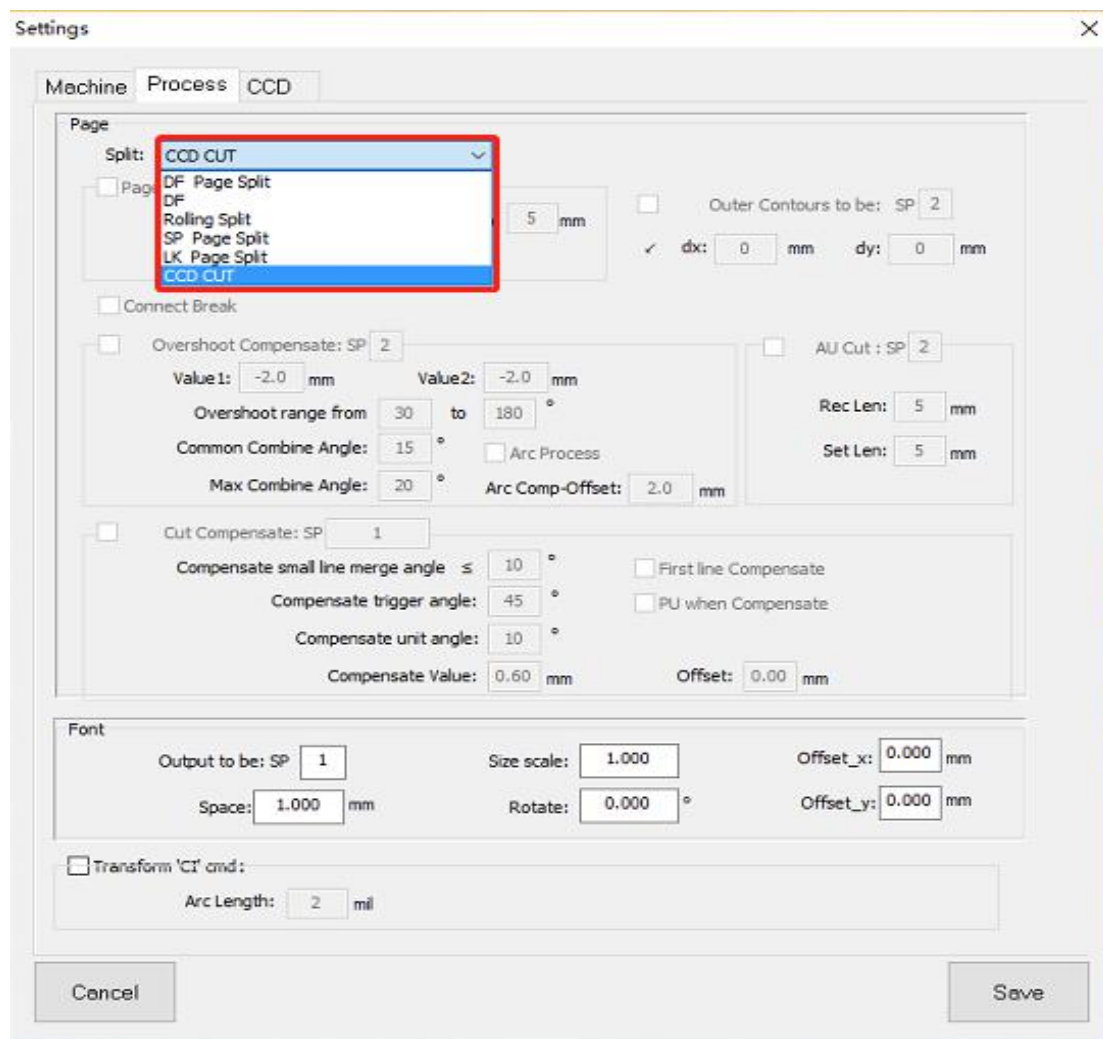


4-1-2-2. Software interface:



- 1: The display area of the file waiting to be sent and the file being cut. If there is a file in position 1 that needs to be deleted, click the stop button in position 5 and then select the uncut file and right-click to send it to the "Send history" (2 position).
- 2: The display area of the cut file. If there is a file that has been cut and needs to be cut again, click the 5 position pause button to select the file name and right-click to return to the waiting cut list to cut again.
- 3: Width: The maximum working size of the device in the X direction. Height: The maximum working size in the Y direction must be set according to the machine model. IP: Machine IP, must be the same as the machine IP in the touch screen. You can click the 5 position stop button and then double-click the yellow area to change it.
- 4: Cutting file detection directory, must be consistent with the output file path in the design software.
- 5: Stop sending files to the machine. You can also click and press other buttons to set the software parameters.
- 6: CCD fast switching button, click to enter CCD cutting mode and running interface.
- 7: Monitor the number of files sent by the software.

4-1-2-3. Parameter setting:

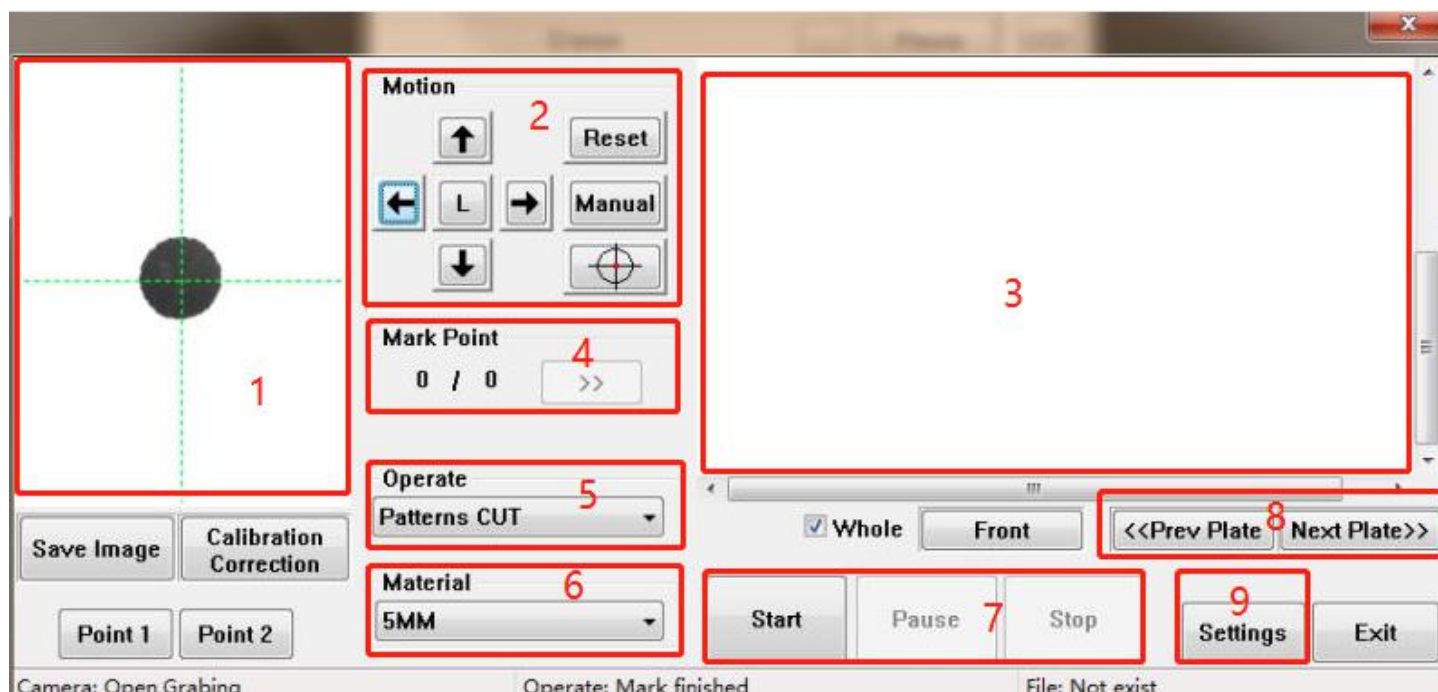


B4 machine has CCD positioning mark point mode and temporary origin without mark point mode, file division type:

- 1) DF Page Split: After receiving the file, the page is divided according to the maximum operating size of the X axis of the device, and no other processing is performed;
- 2) DF: After receiving the file, it will be sent directly to the device without any processing; if the size of the file in the X or Y direction is bigger than the operating size of the device, the system will prompt "File Error".
- 3) Rolling Split: Rolling and cutting according to the piece, the cross-page is automatically divided into the next version, and the graphic lines are not forced to be interrupted; the feed length is automatically divided by the file coordinates of the cross-page; it is mainly used for file cutting without mark points, such as clothing fabric cutting .
- 4) SP Page Split: The files are sorted according to the SP serial number, and are sent in order from SP1 to SP8. Different SP numbers can specify different tools mainly used for file cutting that requires multiple tools for the same file.
- 5) LK Page Split: Generally used in the shoe industry, leather V-shaped cutting and contour cutting are combined into one, and the tool realizes one-time cutting.
- 6) CCD Cut: High-precision positioning and cutting of files with mark points.

Note: B4 machine mainly uses 3,4,6 mode.

4-1-2-3. CCD positioning mode interface operation instruction:



- (1) The camera display area. Check whether the camera finds the mark point through this window.
- (2) Move the camera position to the mark point, the button in the lower right corner can make the camera automatically move to the middle of the mark point.
- (3) Cutting file display area: The left and right mouse buttons can be customized to start the cutting page. The mouse wheel is used to zoom the file display size.
- (4) This area shows the number of mark points found and the total number of mark points in the cut file. When the mark point search fails, we can manually find the center of the mark point and click ">>". The camera will find the next point.
- (5) Patterns Cut
 - ❖ Marks Cut: The machine will cut the mark points in the file with a fixed size (the cutting size of the MARK points can be set in the mark point parameters). It is mainly used for printing the material on the front side and cutting on the back side. For example: printing carton.
 - ❖ Patterns Cut: This function is used to cut a single piece of material with a length less than the working length of the machine, such as KT board, acrylic, PVC board, etc.
 - ❖ Auto Multi Cut: This mode is used to cut the length of a single file beyond the actual effective cutting length in the X direction of the machine. The system will automatically divide the graphics into 2 or more layouts, and complete the cutting in 2 or more times by rolling feed; the X direction of the file is required. The total length is approximately the same as the print.
 - ❖ Auto Repeat Cut: This mode is mainly used for each version of the file is the same, there are multiple layouts, the machine needs to repeatedly cut the same pattern.
 - ❖ Auto Multi Cut(Panel): It is mainly used for sheet cutting of documents and materials whose X direction is greater than the maximum range of the machine's X direction. For example: ultra long printed KT board.
- (6) Choose different thickness, change tool different lifting height.
- (7) Start and pause button.
- (8) Switch the file to be cut.
- (9) Camera offset and cutting operation parameter settings.

4-1-2-4. CCD - Camera parameter

Machine Process CCD

☒ SP Order 1

Camera Mark Move Control

Model: Corence 2

Calibration: SMM Edit Add Del

INTRINSIC

fx: 1524.100000 fy: 1521.030000
 cx: 333.932000 cy: 287.866000

DISTORTION

k1: -0.099067 k2: -0.389182
 p1: 0.003037 p2: 0.003133

ROTATION

r1: -0.999977 r2: 0.000482 r3: -0.006715
 r4: -0.000443 r5: -0.999983 r6: -0.005823
 r7: -0.006717 r8: -0.005820 r9: 0.999960

TRANSLATION

t1: 12.845600 t2: 6.328940 t3: 82.348000

Ratio_X: 1.000000 Ratio_Y: 1.000000

Camera Offset (mm) 3

CX: 32.700 CY: 0.900

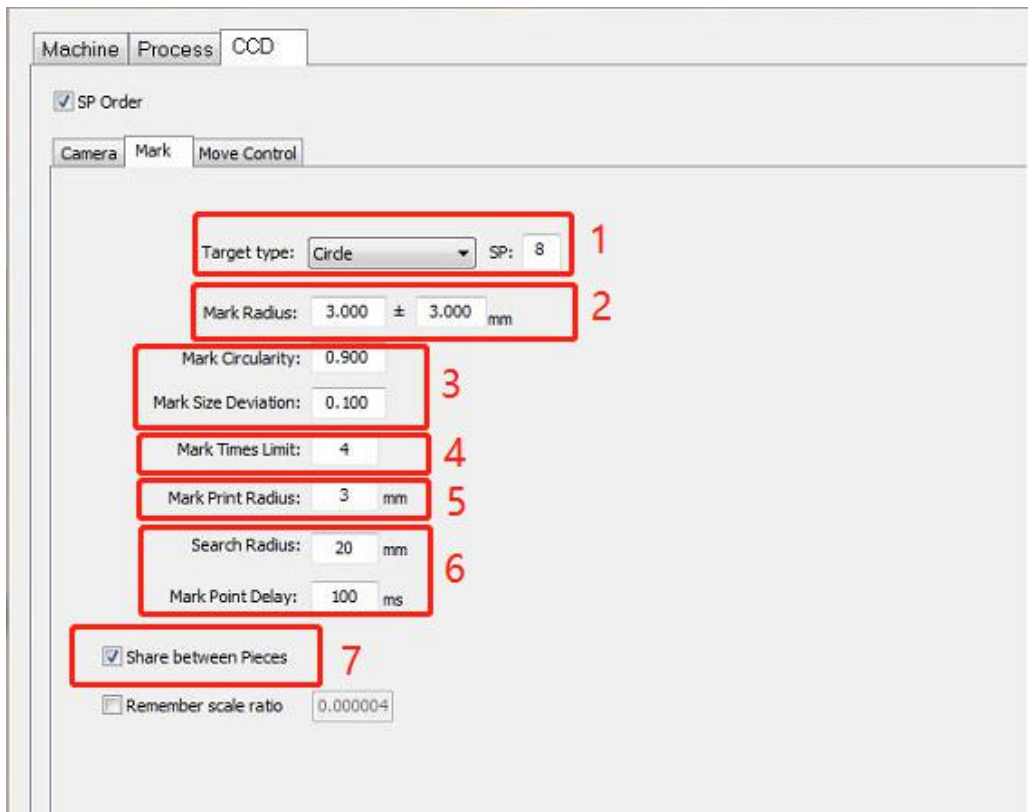
Exposure time: 12000 4

Auto Load

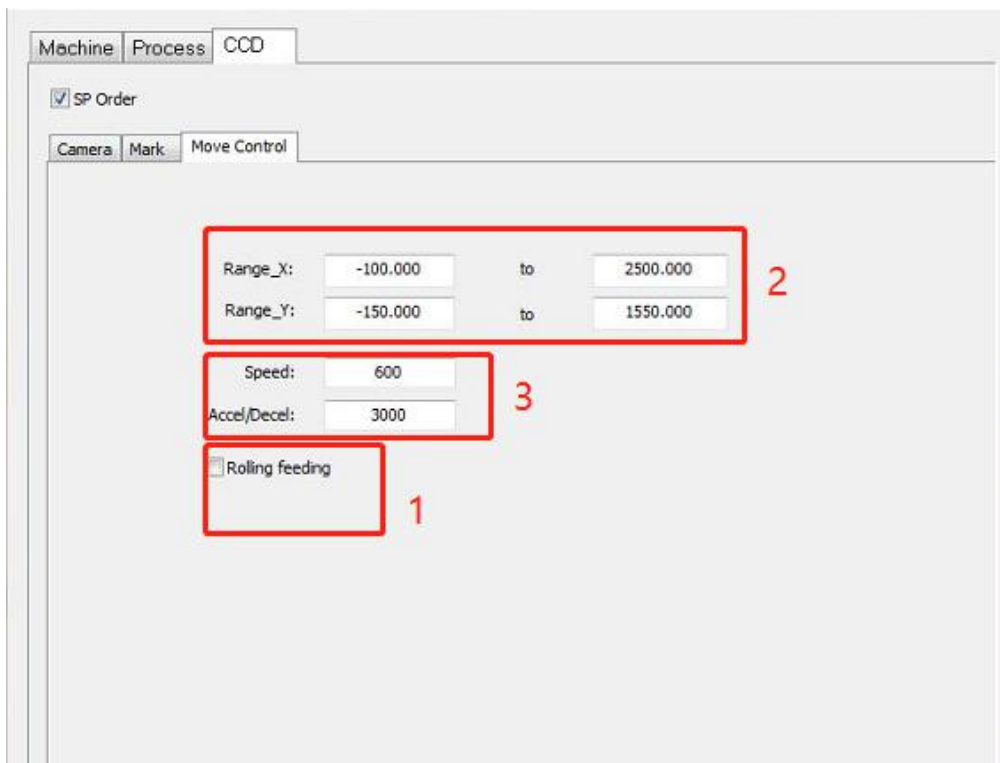
- (1) Files are cut according to SP order.
- (2) The camera model has a new version of Corence and an old version of Basler, please pay attention to switching.
- (3) Camera Offset: Adjust when there is a big error between the actual cutting and printing graphics. For factory parameter settings, refer to the parameter paper posted in the electrical box.
- (4) Exposure time: Different materials and light environment may cause unclear photos. Need to adjust the camera's exposure, maximum 20000, minimum 1000.

4-1-2-5. CCD - Mark point

- (1) Target type: There are two types of mark points, cross and dot. It is recommended to set SP8 if the dot is selected as the marked point. It is recommended to select SP1 if cross is selected as the mark point.
- (2) Set the recognition range of dot mark points, cross mark points do not need to be set.
- (3) If the printed circular mark points are deformed, two parameters can be adjusted to correct them.
- (4) Set the number of times the camera looks for mark points, the more times the higher accurate.
- (5) Set the cutting size of the marked points, mainly for round marked points.
- (6) As the value increases, the camera search range increases.
- (7) For the cross-version document sharing MARK point file cutting.



4-1-2-6. Move control

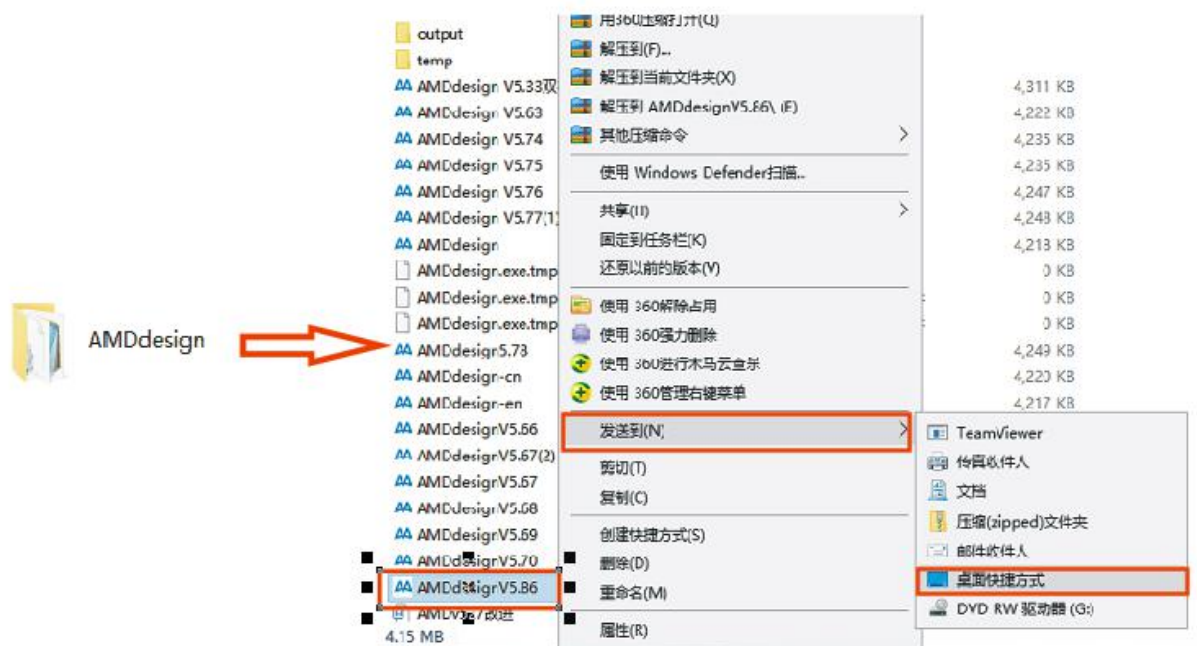


- (1) When continuous cross-cutting, this function needs to be turned on.
- (2) Set the maximum X and Y range of the camera to find the mark point, for example: if the machine model is B4-2516, you need to set the 2 position to 2550 and 1650. Otherwise, the system will prompt that the cutting range is exceeded during the process of finding the mark point.
- (3) The speed of the camera when looking for a mark.

4-1-3. AMD Design software

4-1-3-1. Software installation:

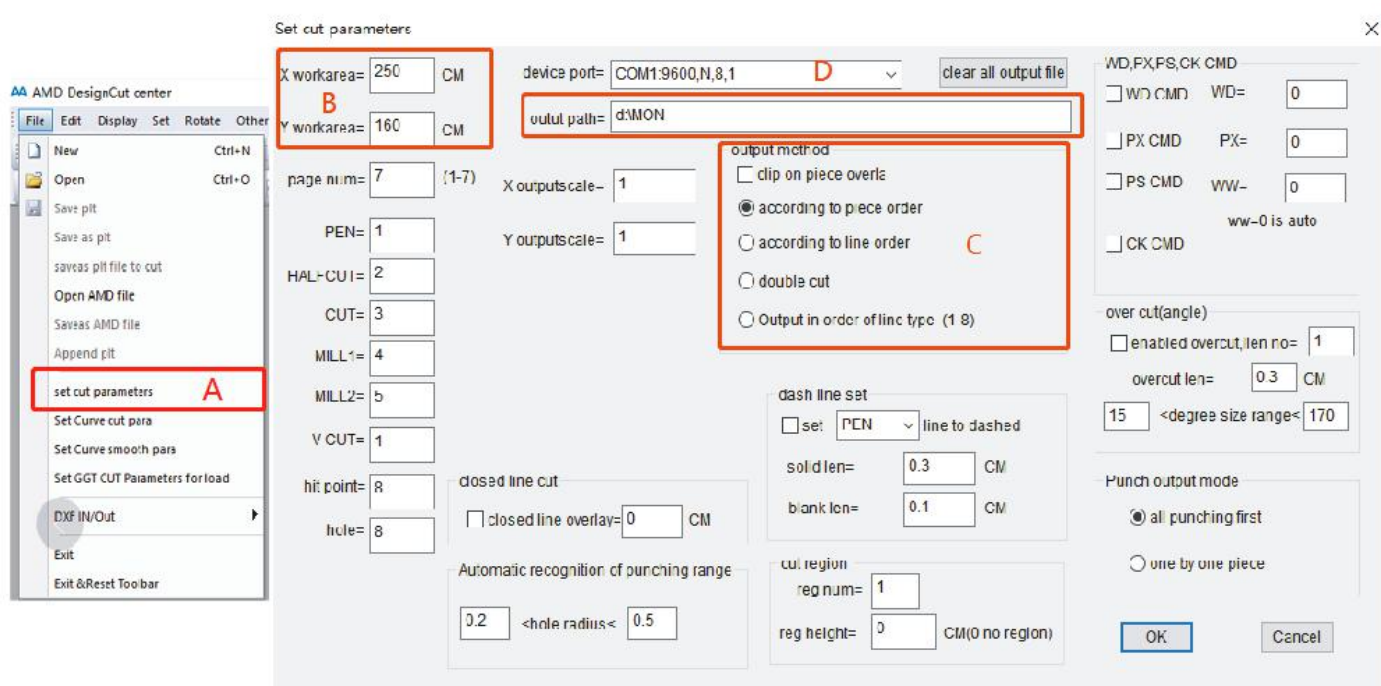
After decompressing the file, find the latest version number in the folder and send the desktop shortcut.



4-1-3-2. Software setup:

4-1-3-2-1. Set machine parameter

- Click "A" to enter the parameter setting.
- Set the maximum working area in the X and Y directions, for example: B4-2516 machine fixed platform, you need to set X = 250cm, Y = 160cm. If it is a rolling platform structure, the X direction can be changed according to the maximum X direction value of the cutting file.
- Select the appropriate mode according to the material cutting process.
- The software output path folder must be consistent with the CCD software target folder.



Comprehensive process

- ❖ It is recommended to check the 2,3,4,5,7,10,11,15 options for CCD mode cutting.
- ❖ It is recommended to select 2, 3, 4, 7, 10, 11, 12, 15 options for Non-CCD mode.

综合数据处理

☐ 0.强力封闭连接裁片长

0.1

CM

☐ 1.删除重合线

☒ 2.删除畸变点

☒ 3.圆顺等分曲线及参数:

要优化的最长直线段=

0.5

CM (0.5 -> 150.0)

最小两线角度=

150

度 (150 -> 170)

大约等分长度=

0.3

CM (0.03 -> 0.9)

最大弧线优化偏差=

0.01

CM (0.001 -> 0.01)

最大弧线圆顺偏差=

0.01

CM (0.01 -> 0.07)

☒ 4.删除曲线过密点

弧线最大偏差=

0.01

CM(0.001-> 0.02)

弧线最长拟合长度=

1

CM(0.3->20.0)

☐ 5.识别冲孔

0.2

<镜孔1: 半径(CM)<

0.5

0.6

<镜孔2: 半径(CM)<

0.9

☐ 6.全体旋转角度=

90

度

☒ 7.设置所有裁片为右上角顺时针切割方向

☐ 8.自动编排切割样板顺序

段长=

2

CM

☐ 9.删除门幅内样片内点线(按距离)

到轮廓最近距离=

1.5

CM

☒ 10.删除孤立点

☒ 11.在转角点起刀

包括封闭的内线

12.调整切割方向

☒ 所有裁片外逆内顺

☐ 所有裁片外顺内逆

☐ 不调整

☐ 13.设置所有轮廓线号=

2

☐ 14.设置所有内线线号=

1

☒ 15.移动整个排料到

距离原点X=

0.1

Y=

0.1

CM

确定

取消

((英文图片))

5 Basic use of equipment

5-1. Turn on the machine

5-1-1. Check before power on

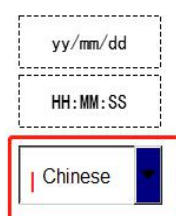
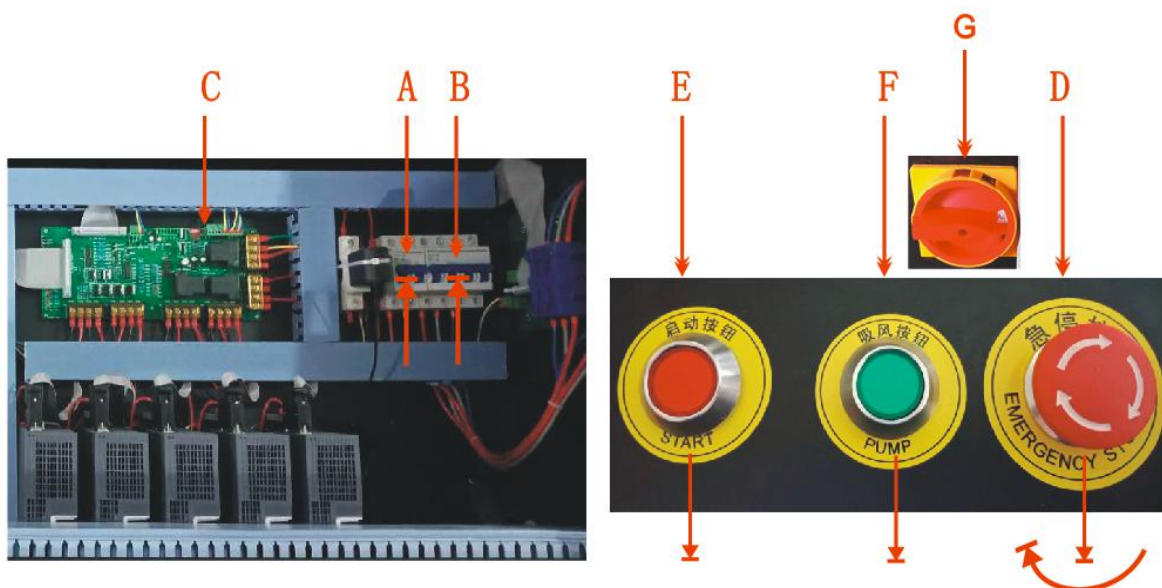
- ❖ Preparation for starting the machine: After installation, check the connection of each circuit, gas source, power supply, and network cable according to the installation method provided in the manual. Manually move the machine head and crossbeam to check whether it is stuck.
- ❖ Use a multimeter to check whether the power supply voltage meets the machine operation requirements. If it does not meet the requirements, install a voltage regulator or change the power supply.

5-1-2. Turn on machine

- ❖ Turn on machine: Push up to open the air switch A, check the LED light at the C position (if it does not light, it means there is a problem with the 220V power supply and need to check). Turn clockwise to

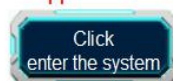
turn on the emergency stop switch D, press the start switch E, the machine will be powered on, wait for 1-3 seconds The screen lights up after a beep. Enter the standby interface G, click I to change the system language you need, click the H position machine will enter the system.

- ❖ Turn on pump: After the machine is normally turned on, push the air switch B upwards, and turn the rotary switch in the G position to the ON position. Press the green air pump button F. The air pump will start. If it does not start, check the power supply voltage at position B or the AC contactor pull-in condition. Note: The air pump will be reversed due to the three-phase electrical phase sequence. If the air pump power supply of the machine is a three-phase 380V voltage, please check the platform adsorption after the air pump is started, and adjust the three-phase electrical power phase sequence in time.



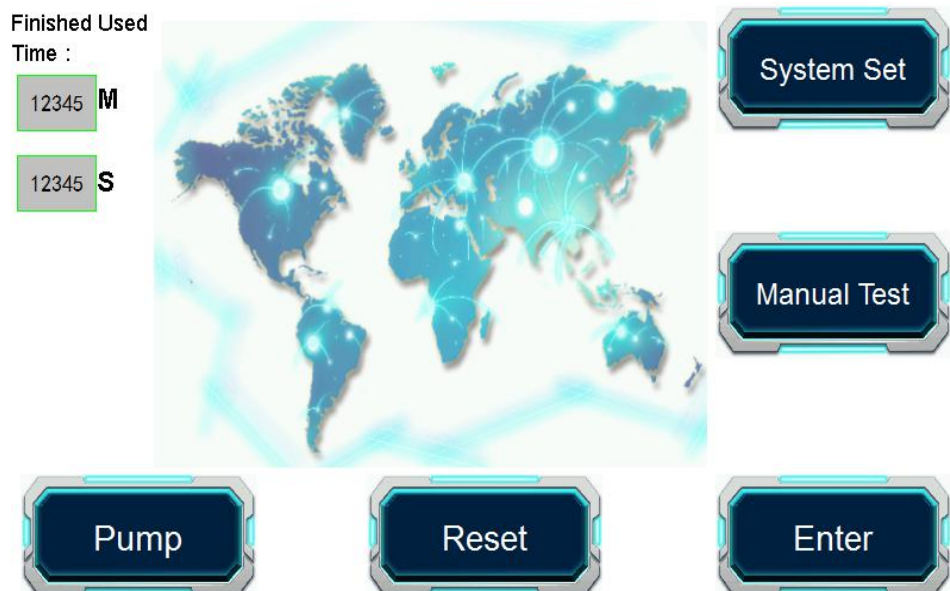
G

H



Technology has changed life

Note: Before clicking the H position, you must clean the items on the machine table to avoid collision when the machine is reset. The reset sequence of the machine is U, Z, U1, Z1, XY synchronization. After resetting, enter the main interface of the machine as shown in the figure below. If you stay in the machine reset interface, please check whether the reset is successful in each direction, check the driver alarm or ask our technicians.



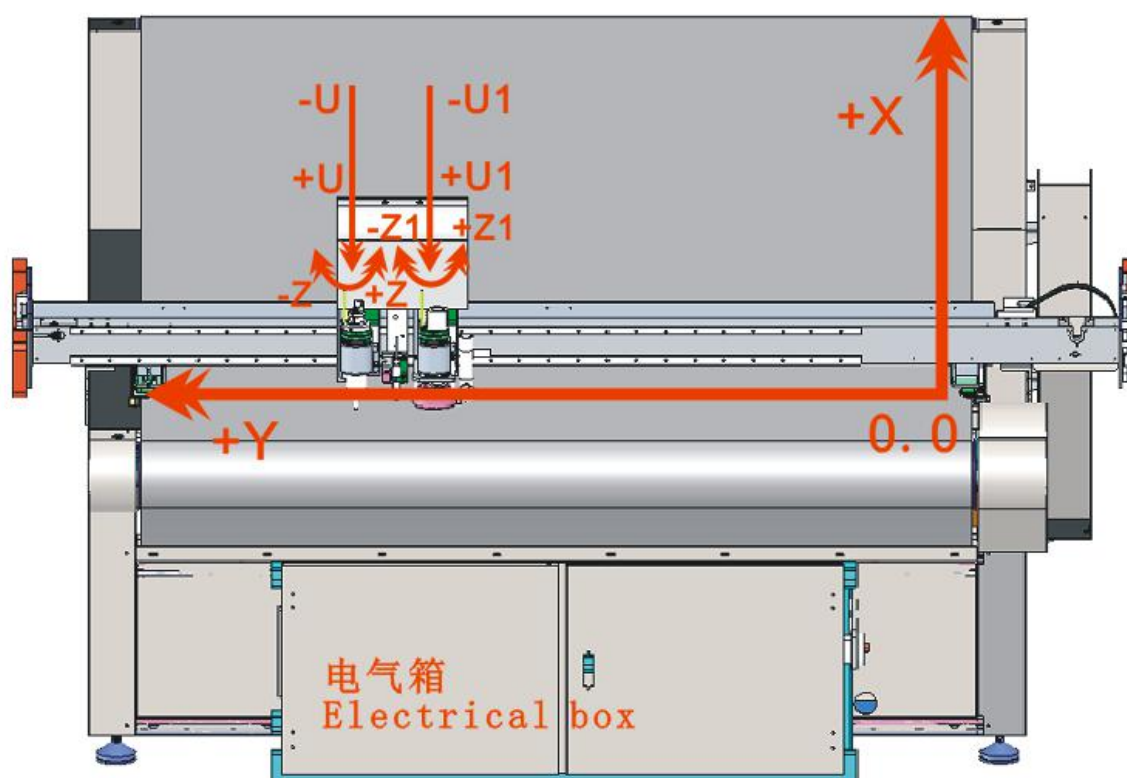
5-2. Machine instruction

5-2-1. B4 machine model

B4 series models are named according to the size of the cutting area. The first two digits are the width in the X direction, and the last two digits are the width in the Y direction. For example, the maximum running width of machine X of B4-2516 is 2500mm, and the maximum running width of Y direction is 1600mm. The current conventional models are: 1013, 1815, 2516, 3020.

The B4 series is also divided into rolling platforms and fixed platforms, please pay attention to distinguish.

5-2-2. For the directions of machine X, Y, Z, Z1, U, U1, details as below picture:



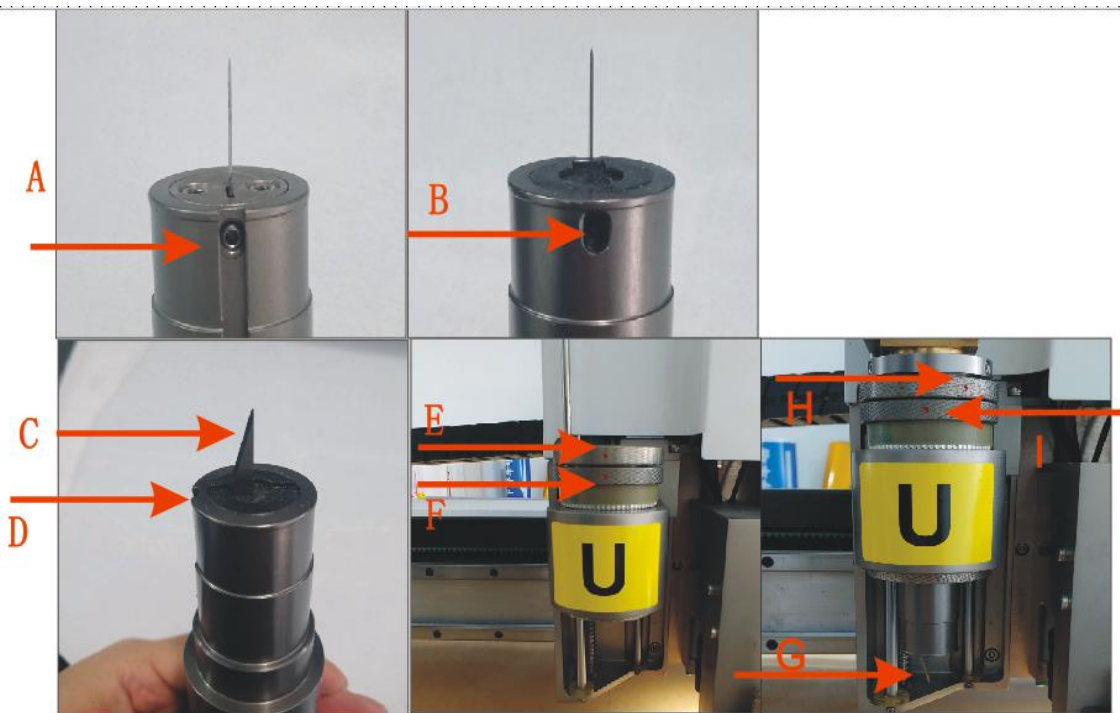
5-2-3. Machine tool installation

The tools that the machine can use are: EOT/electric oscillating tool, UCT/universal cut tool, CT/creasing tool, KCT/kiss cut tool, V-CUT, URT/universal cut tool, PRT/power rotary tool, POT/pneumatic oscillating tool, which

can be selected according to the cutting material. Refer to the catalog for details.

For the installation and deep debugging of the tool, please refer to the video in the U disk. The following takes the EOT and KCT installation steps as examples.

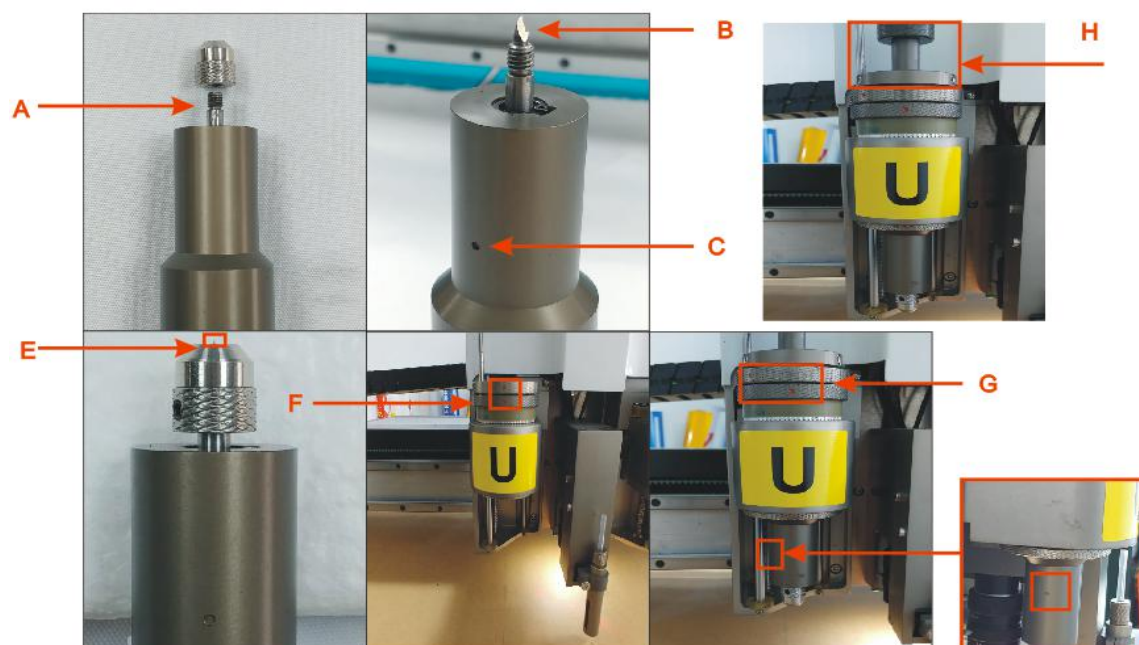
5-2-3-1: EOT installation:



A: blade fixing screw, B: blade holder fixing screw, C: blade edge direction must be consistent with D notch direction, EF red dot must be in a straight line when installing and removing the tool, HI position red dot can not be in one when fixing the tool Straight line, G: The position of the cutting edge must be left.

Note: After the blade of the vibrating knife is fixed, the vibrating motor rod must be turned once to ensure that there is no obstacle up and down the blade. After the installation of the tool, a protective cover must be installed.

5-2-3-2: KCT installation



A: Open the mounting base,

B: the direction of the blade position,

C: the dot in the position,

E: the length of the exposed tip is equal to the depth of the material to be cut,

F: before loading the tool, make sure that the vertical direction of the small red dots is in the same direction
Straight line,

G: Tighten the locking ring, the small red dots on the upper and lower can not be in the same line, pay attention to the circular hole at the C position to the left, and adjust the elastic pressure of the knife at the H position.

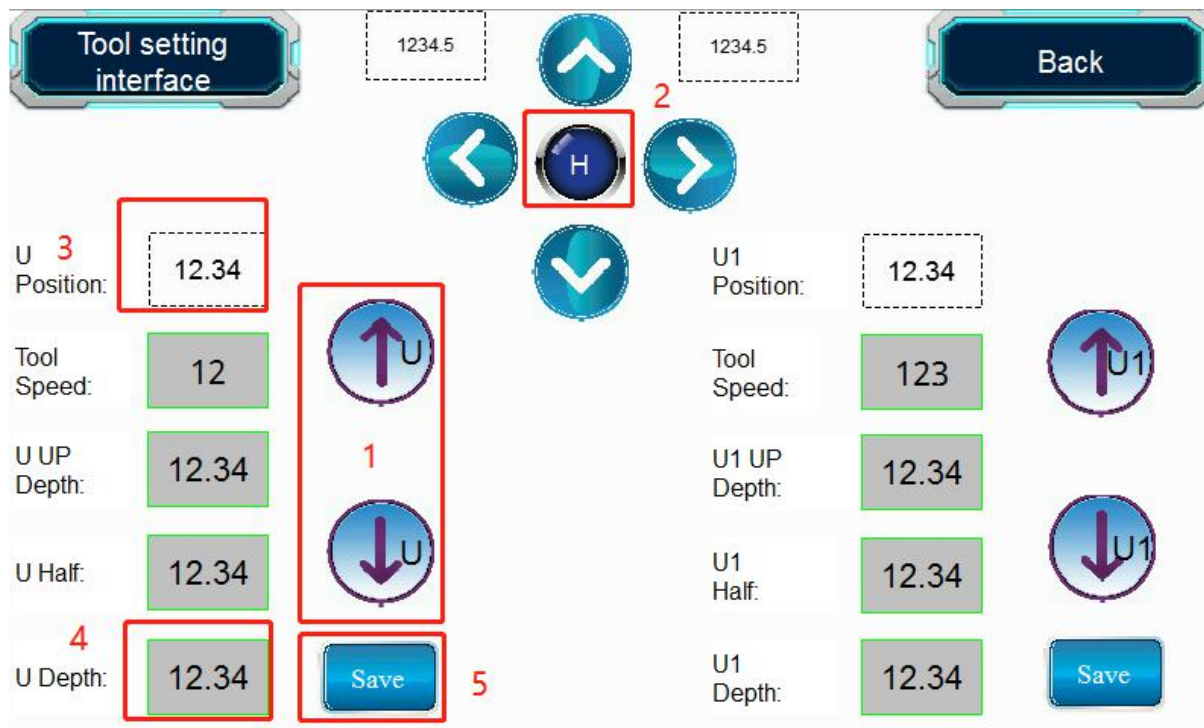
Note: The tool depth must be readjusted after replacing the tool or blade;

The usage of each tool can refer to the following figure

Number	Material	Remark	Tool	Recommended blade	cut speed	Acc speed
1	KT board	3~5MM	EOT	16° or 26° , 0.63mm thickness blade	300	2000
			v-cut	45° big V cut blade	300	2000
2	roll material	1MM以内	UCT	45° , 0.63mm thickness blade	300~500	3000
			KCT	graphtec blade	300~500	3500
3	corrugated board	1~3W	EOT	16° or 45° , 0.63mm thickness blade	400	3500
			CT	wheel 1	400	3000
		3~7W	EOT	16° , 0.63mm/1mm thickness blade	300	2000
			V-cut	small angle V cut blade	200	2000
			CT	wheel 2/3	300	2000
4	ivory board	≤1MM	EOT	16° or 45° , 0.63mm thickness blade	300~500	3500
			UCT	45° , 0.63mm thickness blade	300~500	3000
			KCT	graphtec blade	300~500	3000
5	acrylic	3~5MM	URT	3MM/4MM router blade	100~150	800
		5~10MM	URT	3MM/4MM router blade	50~100	500
6	PVC foam board	1~5MM low density	EOT	16° or 26° , 0.63mm/1mm thickness blade	100~300	2000
			UCT	16° or 26° , 0.63mm/2mm thickness blade	100~300	3000
		5~10MM high density	URT	3MM/4MM router blade	100~200	1000
			URT	3MM/4MM router blade	50~200	500
7	honeycomb board	10MM	EOT(big)	16° 1mm thickness blade	50~200	1500
		10MM~20MM	POT	16° 1mm thickness blade	50~150	1500
8	fabric	single ply	PRT	round/polygon knife with radius 20 ~ 28	300~500	4000
		1~10 ply	PRT	round/polygon knife with radius 20 ~ 28	300	2000
9	plastic corrugated	5mm	EOT	16° 0.63mm/1mm thickness blade	300	3000
			UCT	16° 0.63mm/1mm thickness blade	300	3000
10	rubber	1~3MM	EOT	16° or 45° , 0.63mm/1mm thickness blade	300	1500
		1~10MM	POT	16° or 45° 1mm thickness blade	150	2000

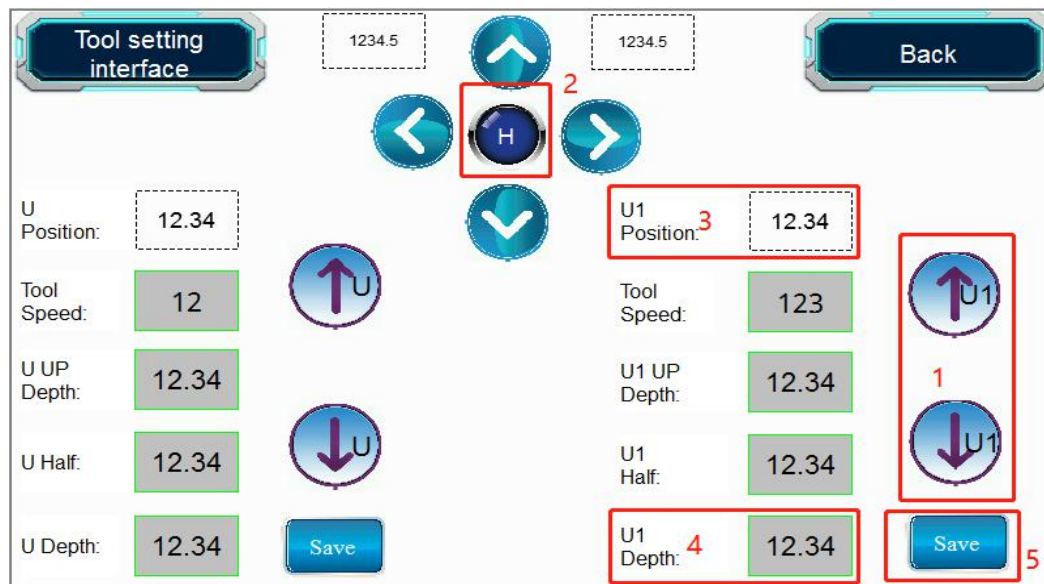
5-2-4. Tool cut depth adjust

5-2-4-1. U depth manual adjust interface



As shown in the figure above, the 1 position button adjusts the depth of the U tool, and the 3 position is the depth display. Click the 2 position when the blade tip is close to the table, the U drop speed will slow down. When the knife tip just touches the table, press the 5 position to save the U depth, and the 4 position is the saved tool depth data.

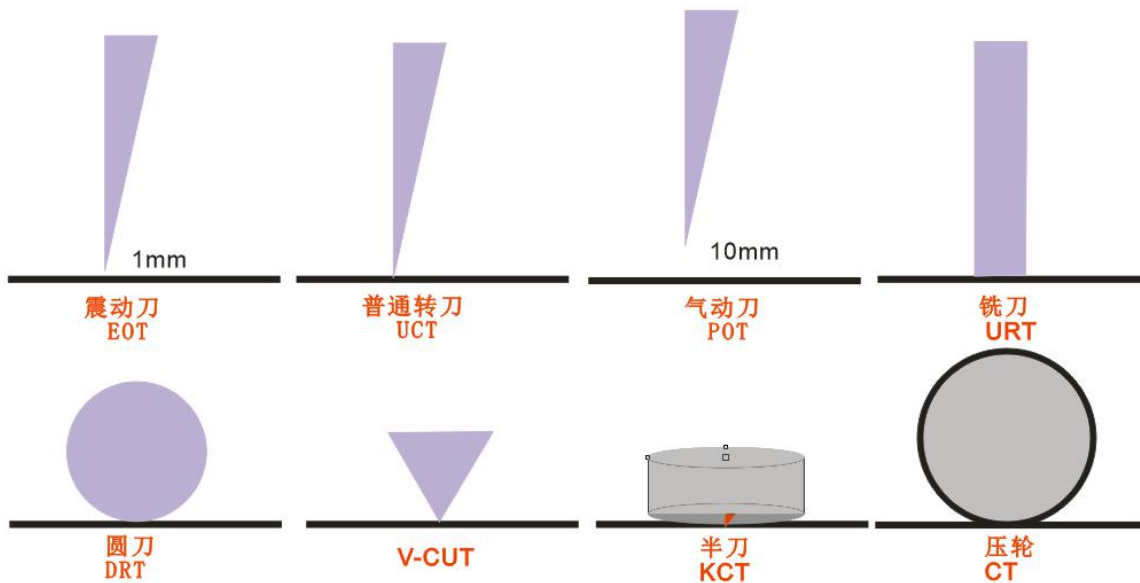
5-2-4-2. U1 depth manual adjust interface



As shown in the figure above, the 1 position button adjusts the depth of the U1 tool, and the 3 position is the depth display. Click the 2 position when the blade tip is close to the table, the U1 drop speed will slow down. When the knife tip just touches the table, press the 5 position to save the U1 depth, and the 4 position is the saved tool depth data.

5-2-4-3. Manually adjust the U, U1 tool depth position of the tool tip away from the table

Note: The figure below is the theoretical value for reference only (unmarked part is 0 distance). If the actual material is not fully cut, you need to manually change the U and U1 depth values.

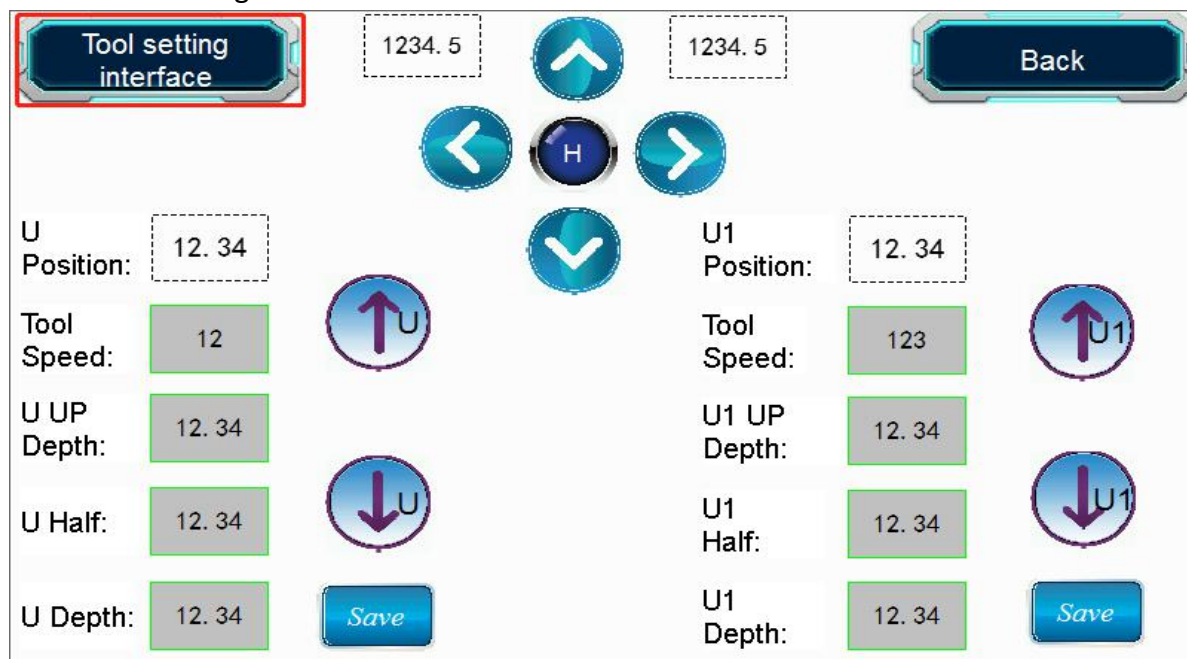


5-2-4-4. Automatic knife depth adjustment device



Design idea: manual adjustment of the knife depth is inconvenient and the adjustment speed is slow, we have designed a device with automatic adjustment of the cutting depth of the tool. (Note: KCT, V-CUT, POT are not suitable for this function, the vibration knife will have an error within 1MM when using this function, it is recommended to cut after the depth test)

Note: First confirm that the machine you purchased has an automatic cutting depth adjustment function. Remove the tool holder before use, and use the tip of the blade for automatic depth adjustment. (Before use, you need to manually press the depth adjustment tool and check the indicator light to determine whether the tool is normal). If the automatically adjusted depth data and the manually adjusted depth data are different, please adjust the tool compensation to correct it. (You need to adjust until the numerical error is within 0.05).

Press "Tool setting interface":

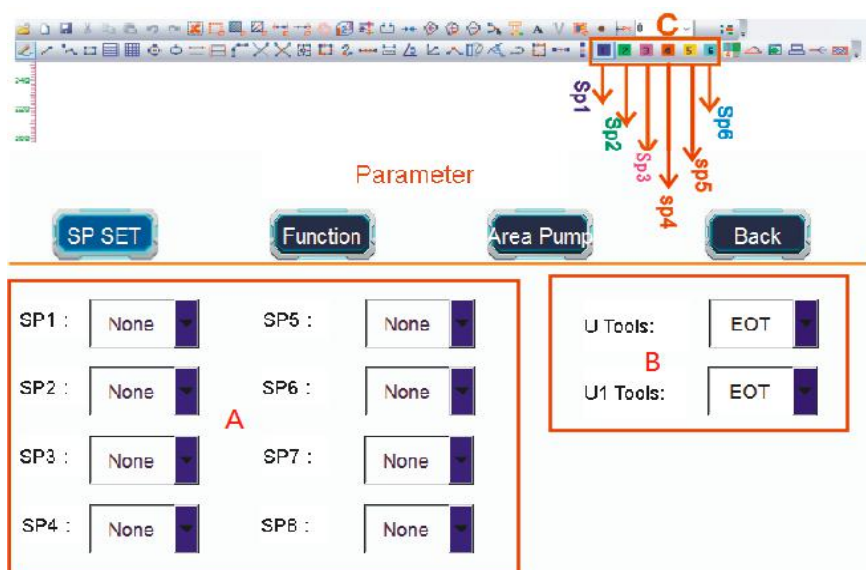


Automatic cut depth adjustment:

- | In software | In machine |
|---|---|
|  |  |

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corrugated paper to make a carton, which requires the creasing wheel to work in advance. You need to set the creasing line color to No. 1 blue and the cutting line to No. 2 green in the design software. In the machine touch screen, SP1 is set to U1, and SP2 is set to U. U tool is set to EOT, U1 tool is set to CT.



5-2-6. Cutting model without mark point

5-2-6-1. The maximum size of the file in the X direction is smaller than the working size of the machine in the X direction. (This function is mainly used for debugging of conventional parameters of the machine and cutting of materials without printing mark points.)

❖ Material placement

Place the materials in the effective working area of the machine, and do not exceed the working range of the machine in the X and Y directions.

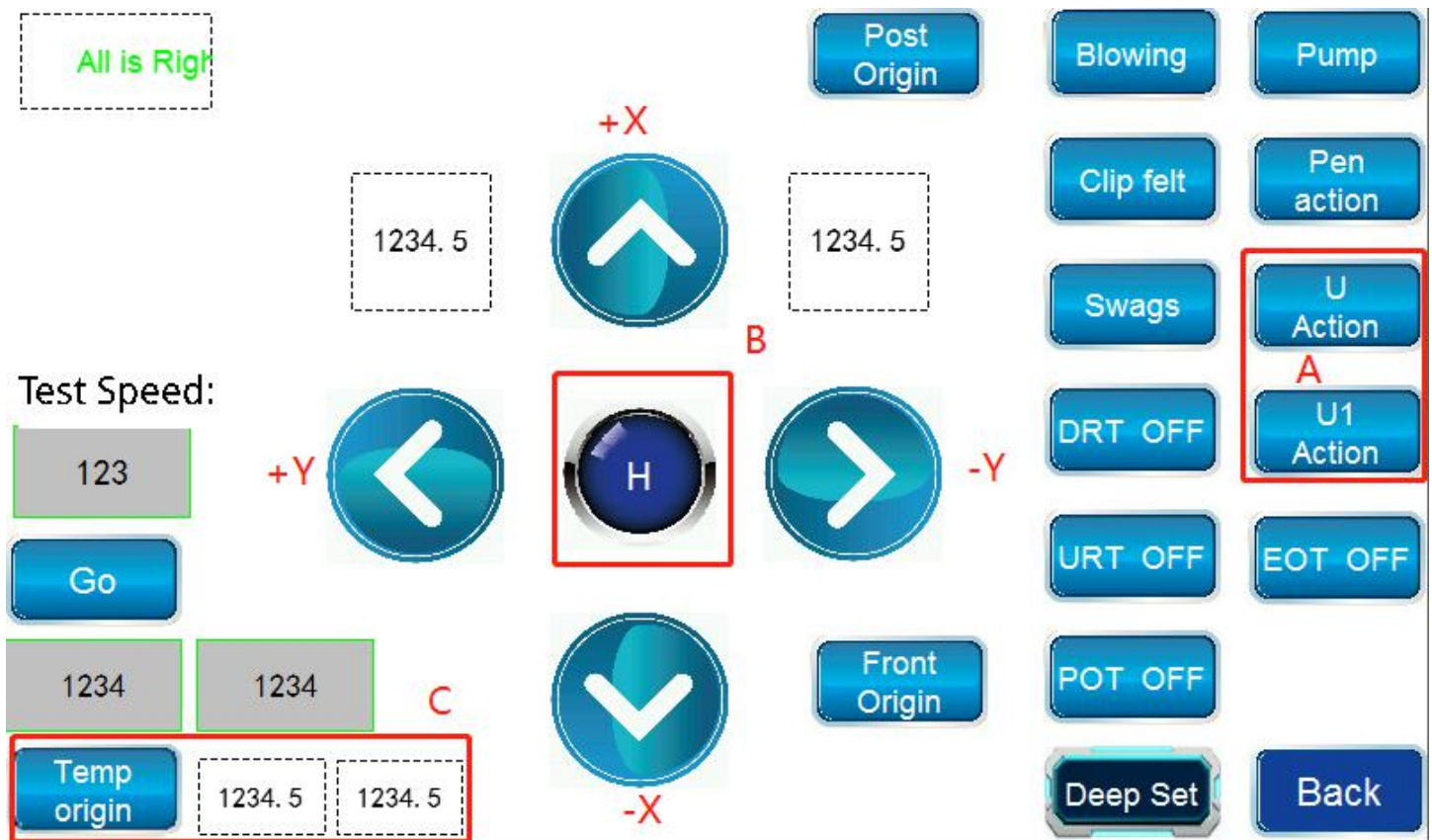
❖ Test tool depth

Click the U action or U1 action in the manual test interface of the touch screen to check the distance between the blade and the table. If the depth is too deep you need to adjust it. See the tool depth adjustment notes for details.

❖ Machine touch screen settings

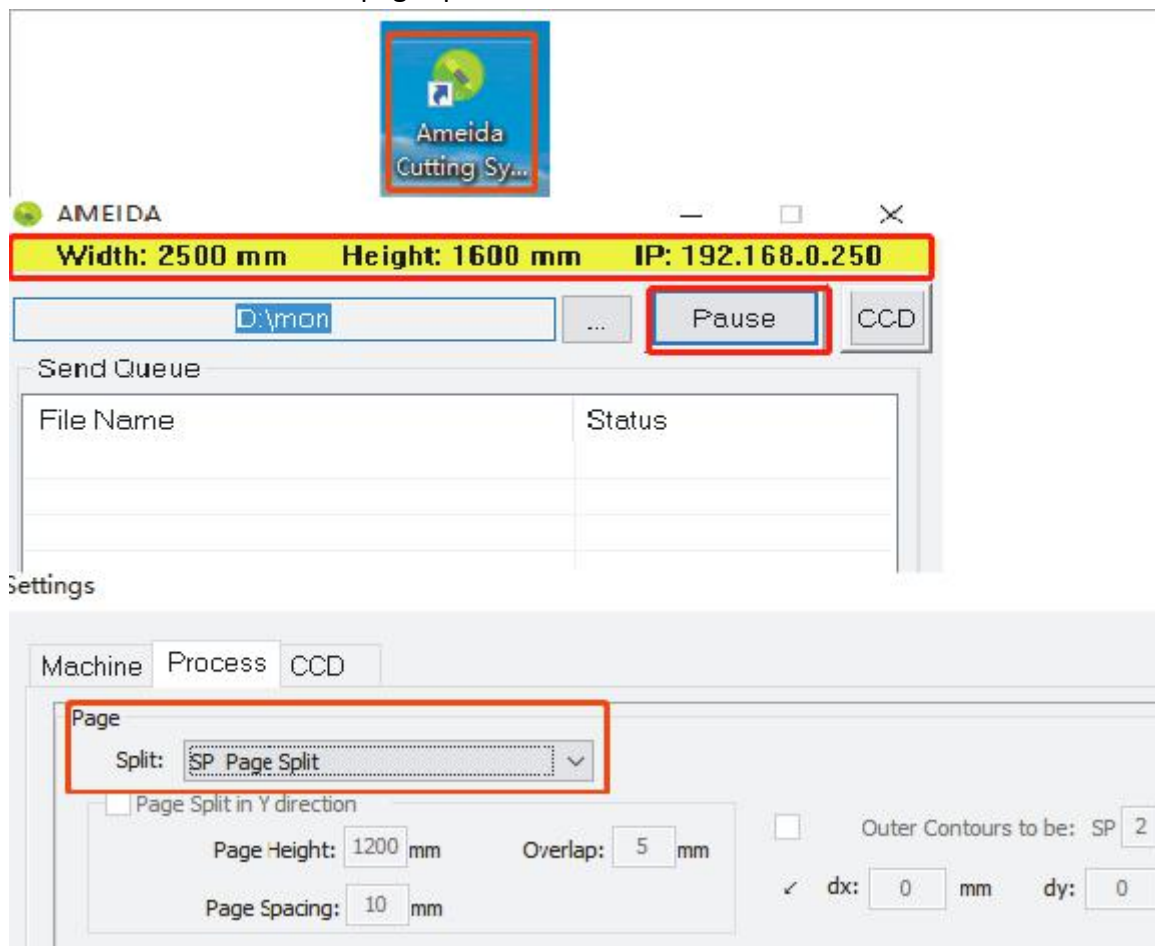
Set the U or U1 tool name in the common parameters, and set the SP number according to the actual tool. For details, please refer to the note of tool number setting.

Manually set the moving direction key on the interface to move the red cross cursor or red dot cursor of the machine head to the range of the cut material. You can click the B position button to change the moving speed of the machine. Click the Set Temporary Origin button C to select the starting cutting position of the machine.

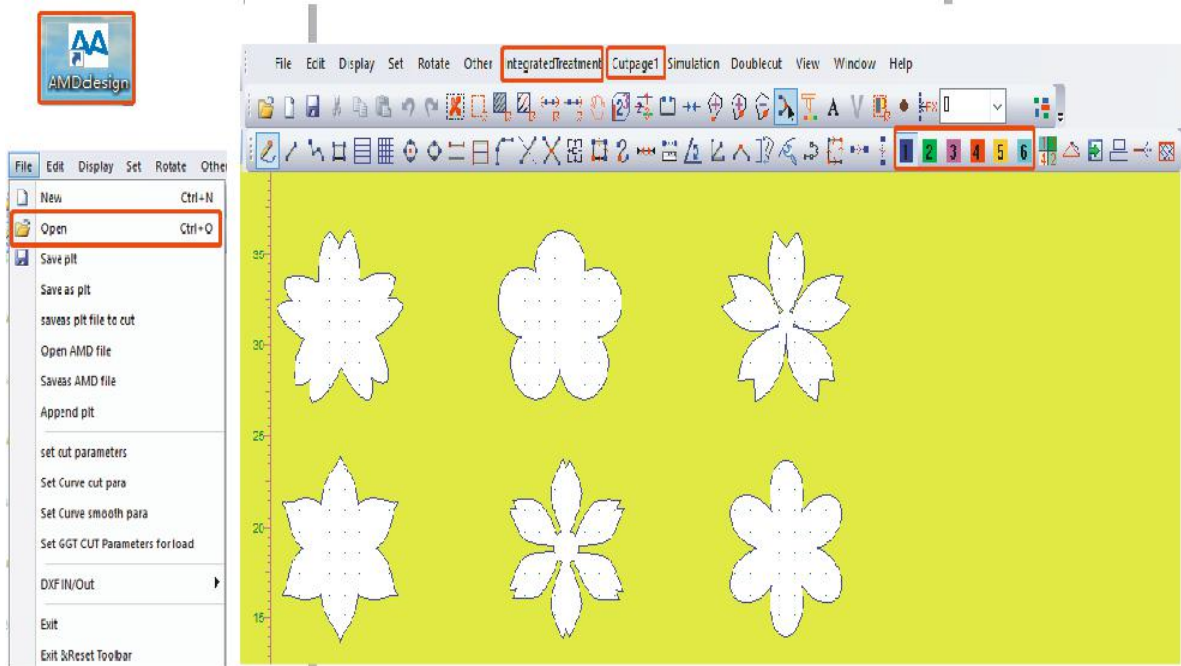


❖ Computer software operation

Double-click to open the CCD software → click the stop button → double-click the yellow area of the software → select the SP page split mode and click Save.

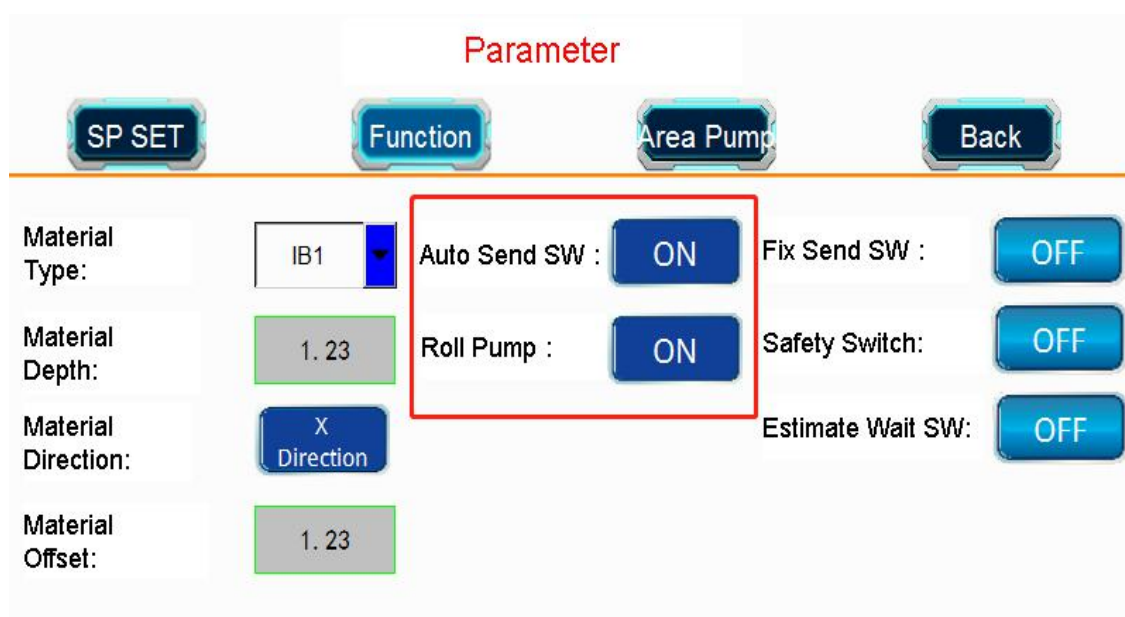


Double-click to open the design software → click the file to open the prepared file in PLT or DXF format → check the XY direction of the file → change the line number or color of the file → click integrated processing → click on the “cut first page” → the machine starts to run.



5-2-6-2. The maximum size of the file in the X direction is larger than the working size of the machine in the X direction

It is basically the same as the cutting setting where the maximum size of the cutting file in the X direction is smaller than the working size of the machine in the X direction. Just need to manually turn on the roll suction and automatic roll switch.

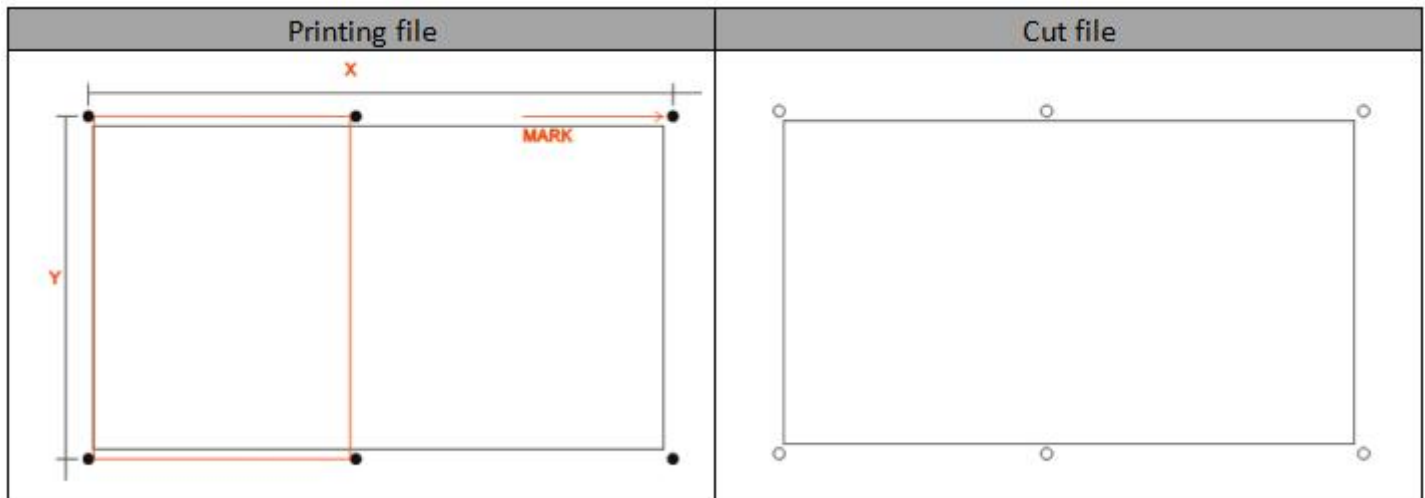


5-2-7. CCD positioning and cutting of circular mark point materials

5-2-7-1. Graphic cutting mode

❖ Cutting file requirements

The maximum range of the X and Y directions must not exceed the maximum cutting range of the machine in the X and Y directions. It is recommended to set the diameter of the MARK point at about 5-6MM. There should be no less than 4 MARK points per page. The arrangement of MARK points is quadrangular (as rectangular as possible, and it can be cut if it is not rectangular). The coordinate arrangement of MARK points determines the accuracy of machine cutting. There must be have MARK points in the CCD cutting file.



❖ Material placement

Place the materials in the effective working area of the machine, and do not exceed the working range of the machine in the X and Y directions.

❖ Test tool depth

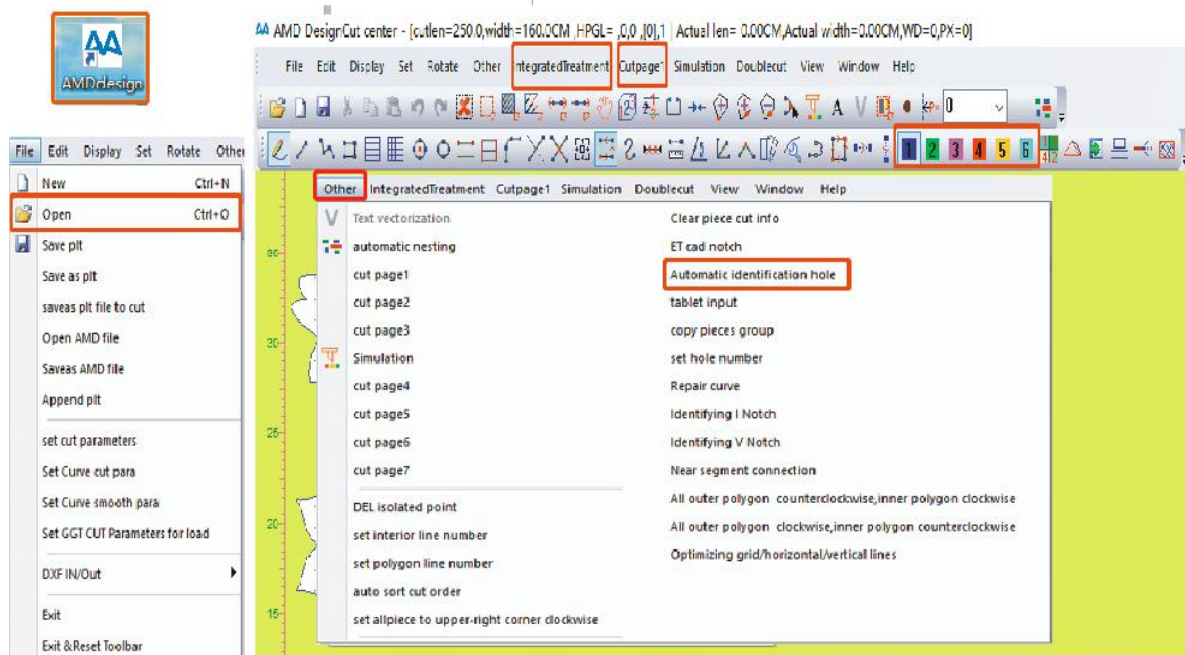
Click the U action or U1 action in the manual test interface of the touch screen to check the distance between the blade and the table. If the depth is too deep you need to adjust it. See the tool depth adjustment notes for details.

❖ Machine touch screen settings

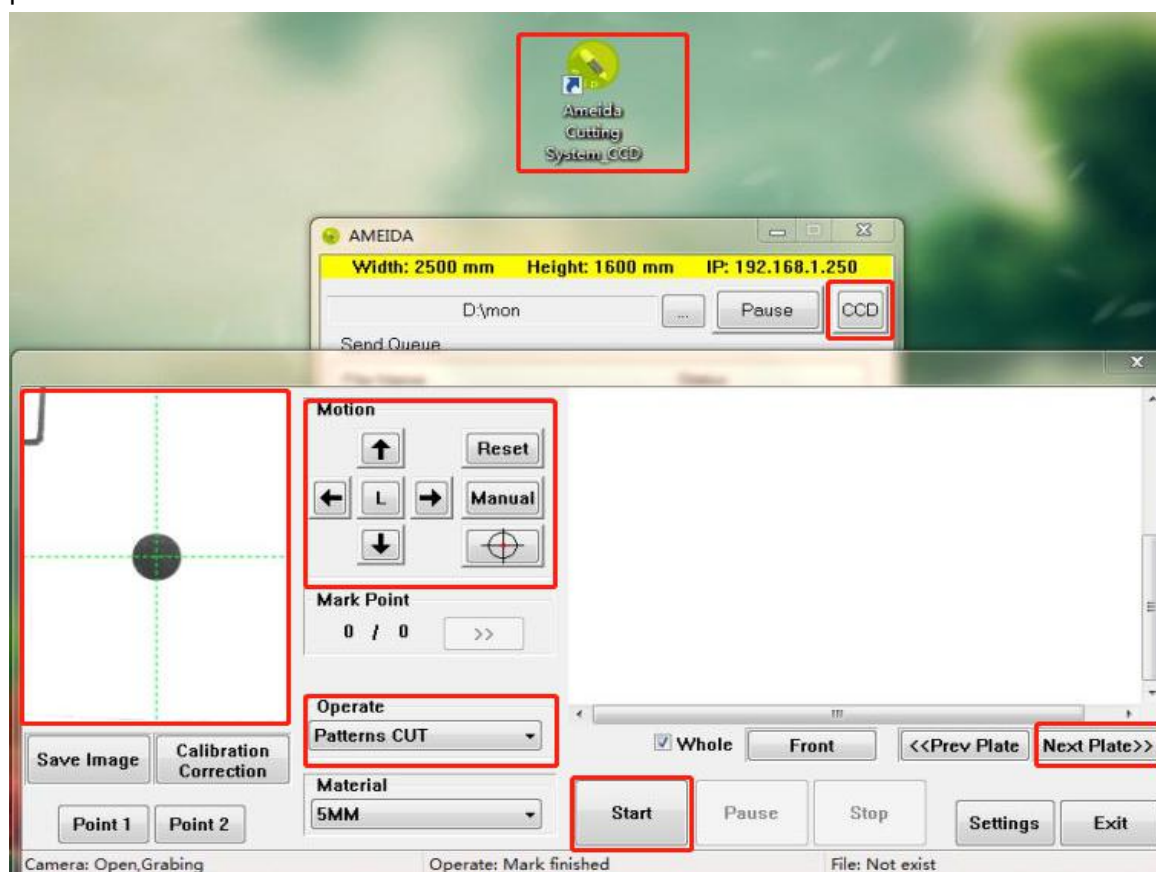
Set the U or U1 tool name in the common parameters, and set the SP number according to the actual tool. For details, please refer to the note of tool number setting.

❖ Computer software settings

Double-click to open the design software → click the file to open the prepared file in PLT or DXF format → check the XY direction of the file → change the line number or color of the file → click integrated processing → click on the “cut first page” → the machine starts to run.



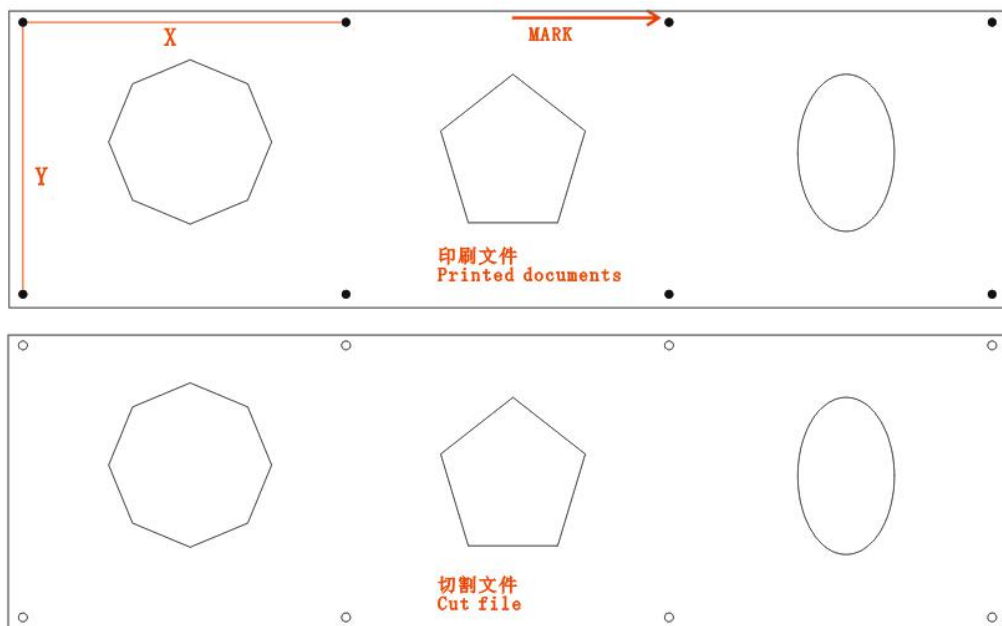
Double-click to open the CCD software → click the CCD button → enter the CCD cutting interface, the camera automatically starts → select “Patterns cut” mode → click next plate → move the arrow key to see the first MARK point in the camera window → click the start button → the machine starts to run.



5-2-7-2. Automatic cross-cutting mode

❖ Cutting file requirements

The distance in the X direction of the mark point is set between 1300-2400mm, the distance in the Y direction of the mark point should not be greater than the maximum working range of the machine in the Y direction. The arrangement of MARK points is quadrangular. The coordinate arrangement of MARK points determines the accuracy of machine cutting. There must be have MARK points in the CCD cutting file.



❖ Material placement

The two mark points in the first row of the X direction of the material must not exceed the zero coordinate position of the machine in the X direction. The X direction of the material is as parallel as possible to the X direction of the platform.

❖ Test tool depth

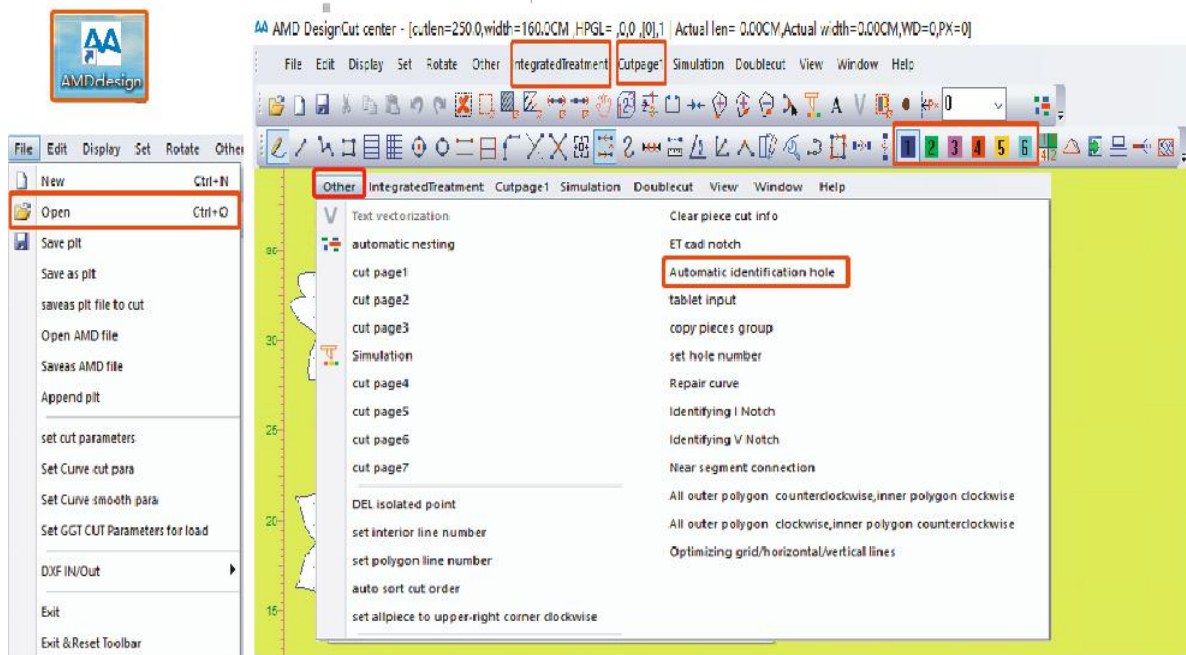
Click the U action or U1 action in the manual test interface of the touch screen to check the distance between the blade and the table. If the depth is too deep you need to adjust it. See the tool depth adjustment notes for details.

❖ Machine touch screen settings

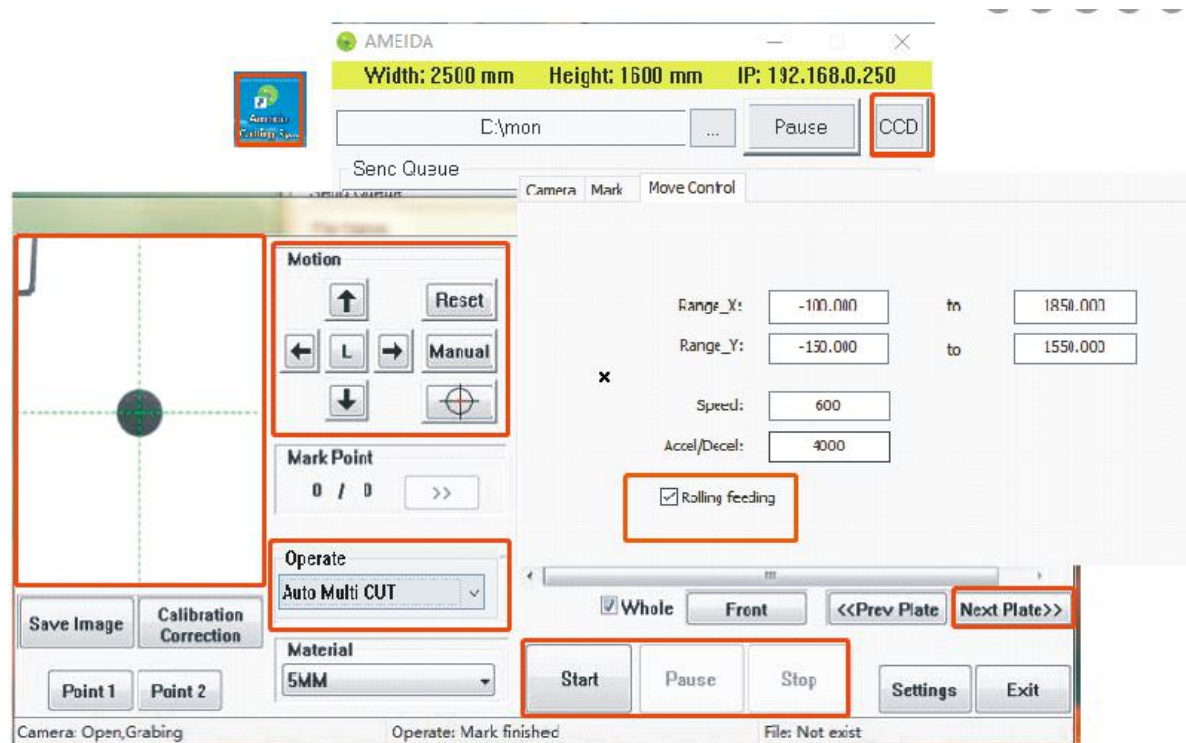
Set the U or U1 tool name in the common parameters, and set the SP number according to the actual tool. For details, please refer to the note of tool number setting.

❖ Computer software settings

Double-click to open the design software → click the file to open the prepared file in PLT or DXF format → check the XY direction of the file → change the line number or color of the file → Click Others and select "Automatically Identification hole" → click integrated processing → click on the “cut first page” send the file to machine



Double-click to open the CCD software → click the CCD button → enter the CCD cutting interface, the camera automatically starts → select “Auto multi cut” mode → Tick “rolling feeding” → click next plate → move the arrow key to see the first MARK point in the camera window → click the start button → the machine starts to run.

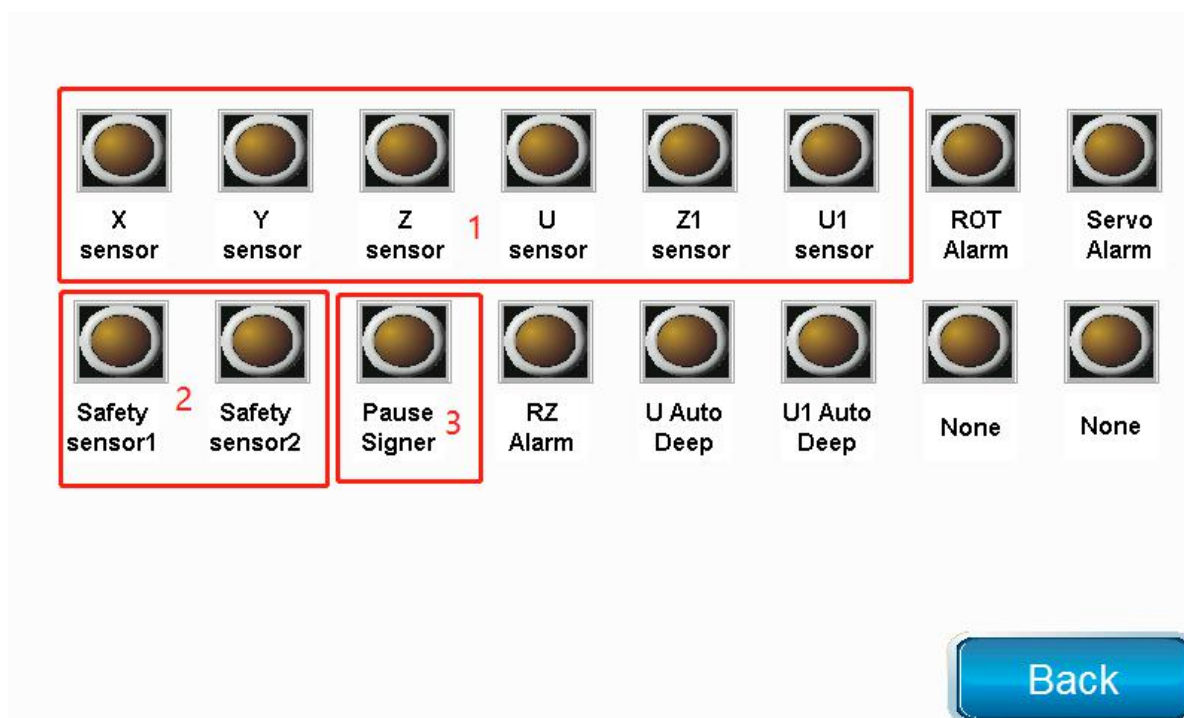


6 System interface

6-1. Device initial status interface



6-1-1. Working status of machine sensors



- (1) X/YZ/U/Z1/U1 direction sensor status
- (2) Front and rear safety switch status
- (3) Pause switch status

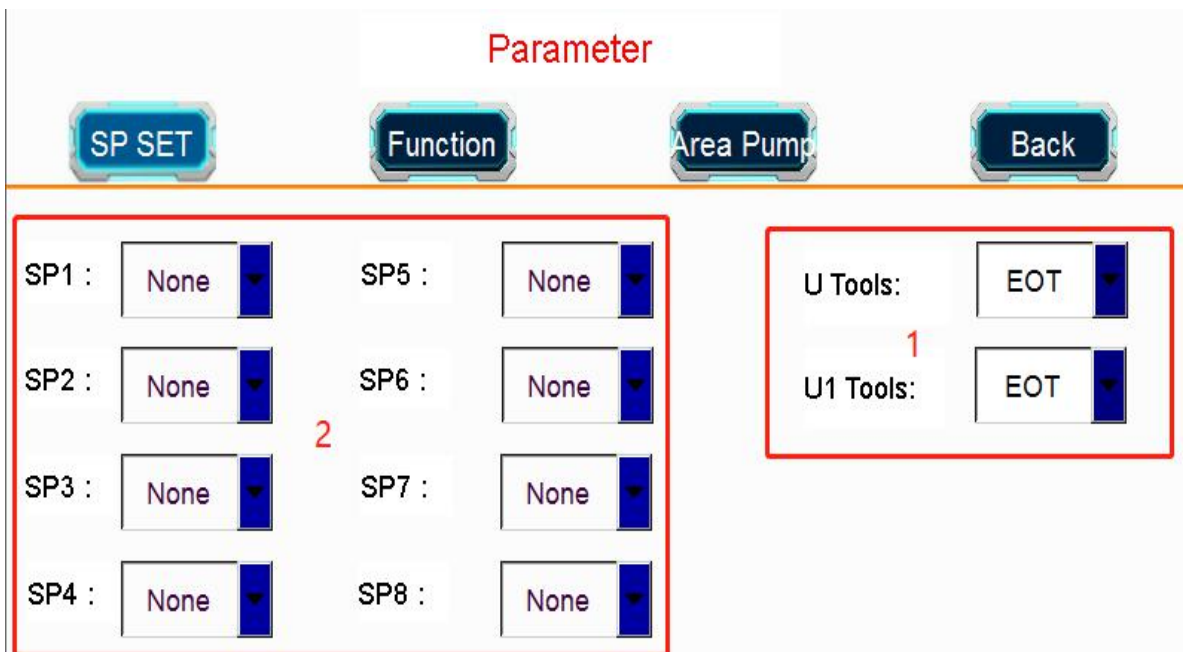
6-2. Main interface



- ❖ System set: Including common parameters, functional parameters, advanced functions
- ❖ Manual test: Including tool testing, tool depth adjustment, temporary origin setting and other functions
- ❖ Enter: Repeat cut last file
- ❖ Reset: Machine will reset to the 0-point coordinate position
- ❖ Pump: Automatic suction function detection

6-3. Parameter

6-3-1. SP set



- (1) Choose U, U1 cutting tool according to the type of material
- (2) The SP number must correspond to the number or color number of each tool in the design software. (The number must be the same as the number in the design software)

6-3-2. Function

Parameter

SP SET Function Area Pump Back

Material Type: 1	IB1	Auto Send SW : ON	Fix Send SW : OFF
Material Depth:	1.23	Roll Pump : ON	Safety Switch: OFF
Material Direction: 2	X Direction		Estimate Wait SW: OFF
Material Offset:	1.23		

(1) For corrugated paper of different thicknesses, CT needs to adjust different depth values. If you set the material type in advance, set different values (in mm) for materials with different thicknesses. When using CT, select the preset material type, the tool will automatically adjust the depth value. Note: This function is only valid when CT runs in X and Y directions.

(2) When the CT works on corrugated paper material, the depth in one direction is normal, the other direction is too large (corrugated paper is damaged), material offset (unit mm) is required in this direction. Note: This function only compensates the depth in one direction of X or Y direction.

(3) When there is no printed material that needs to be cut continuously (cut - roll - cut - roll...), Auto send SW and Roll pump switches need to be turned on. Turn off the fix send SW switch. Fix send SW: Each time the length of the table feeding is fixed. When using CCD positioning cut mode, turn on the automatic feed switch in the software, the system will automatically turn on three switches: Auto send SW, Fix send SW, Roll pump.

(4) Used to check whether the cutting range of the file is within the coverage of the material. When the file is sent to the machine, the cursor of the machine will move according to the maximum cutting range of the file. If the cursor moves within the material coverage, the machine will work normally. Please turn off this function when using CCD positioning cut mode.

6-3-3. Area pump

Parameter

SP SET Function Area Pump Back

OFF	OFF	Area Switch: 2	OFF
OFF	OFF	Pump Type:	manual
OFF	OFF	Flow Value: 3	123
OFF	OFF		

(1) "On" means that the corresponding platform area opens the adsorption.

- (2) When “ off ” , the whole cutting range has adsorption effect by default. After opening, select the area where you want to turn on the adsorption effect at 1 position.
- (3) Pump type: manual - you can select pump work area manually, flow - pump work area will turn on/off automatic (Follow the real-time cut area)

6-4. Function parameter

6-4-1. Speed

Speed		
Speed	Offset	Function
Pen Speed: 123 1 Pen Accel: 1234	Move Speed: 1234 2 Move Accel: 12345	KCT Speed: 123 3 KCT Accel : 1234
EOT Speed: 123 4 EOT Accel : 12345	URT Speed: 123 5 URT Accel: 1234	DRT Speed: 123 6 DRT Accel : 1234
CT Speed: 123 7 CT Accel: 1234	VCut Speed: 123 8 VCut Accel : 1234	UCT Speed: 123 9 UCT Accel : 12345

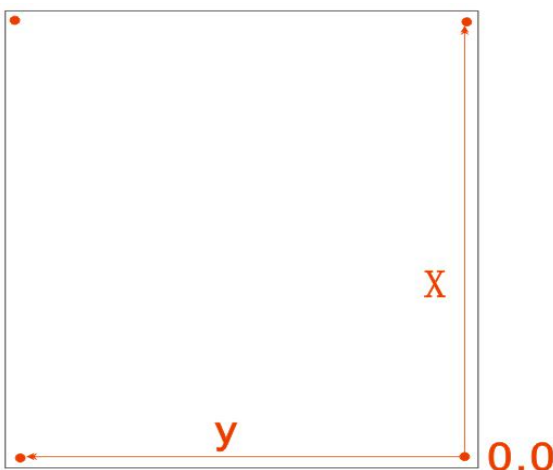
- ❖ Pen tool move speed/acceleration, reference data: 600、4000
- ❖ Machine no load move speed/acceleration, reference data: 600、5000
- ❖ KCT move speed/acceleration, reference data: 500、4000
- ❖ EOT move speed/acceleration, reference data: 300、2000
- ❖ URT move speed/acceleration, reference data: 100、500
- ❖ DRT move speed/acceleration, reference data: 400、3000
- ❖ CT move speed/acceleration, reference data: 500、3000
- ❖ V-CUT move speed/acceleration, reference data: 400、3000
- ❖ UCT move speed/acceleration, reference data: 300、3000

6-4-2. Offset

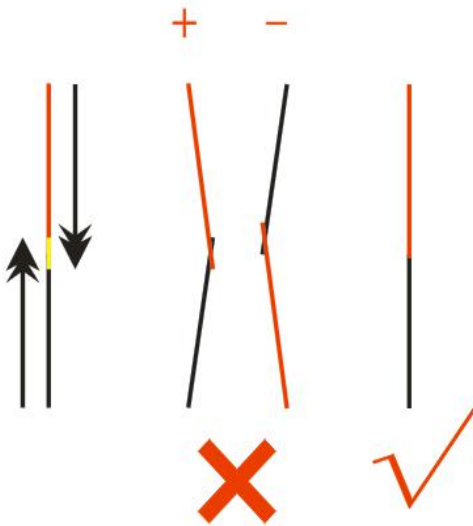
Offset setting

Speed	Offset	Function	Back
Pen Offset X: 123.4 Pen Offset Y: 123.4 ⁴	Pen Down Delay : 123 Pen Up Delay : 123 Cut Down Delay : 123 ⁷ Cut Up Delay : 123	X Reset Offset: 123 Y Reset Offset: 123 ¹ Calibration X1: 123 Calibration Y1: 123 ³	
U Offset X: 123.4 U Offset Y: 123.4 ⁵	U Tang Angle Compensation: 12.3 U1 Tang Angle Compensation: 12.3 ²	POT Speed: 123 POT Accel : 1234 ⁸	
U1 Offset X: 123.4 U1 Offset Y: 123.4 ⁶			

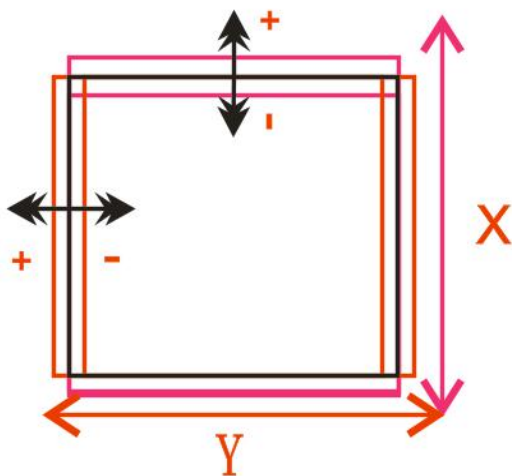
- (1) It is used to adjust the zero position of the machine (the position where the cursor point stays after resetting). The running track of the cursor must be the same as the effective cutting size of the machine and in the center of the platform. See below picture:



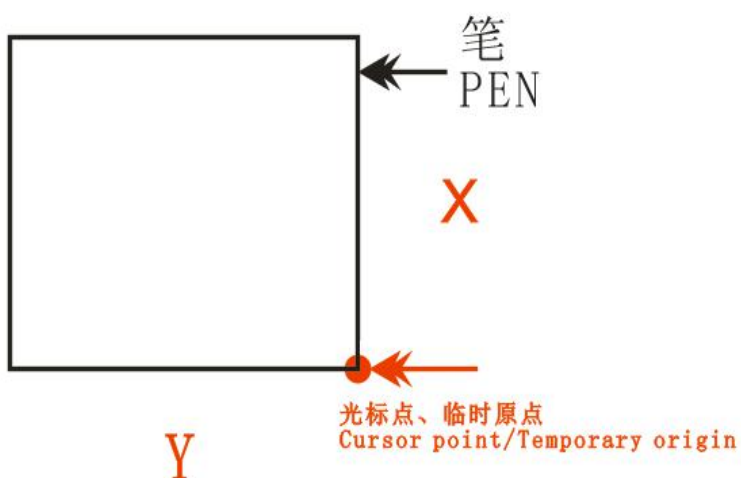
- (2) Used to adjust U, U1 tool Z direction reset zero position. Use the U tool to cut a straight line in the opposite direction. You need to ensure that the two straight lines can overlap and intersect, observe the effect and adjust the parameters. U1 tool adjustment method is the same.



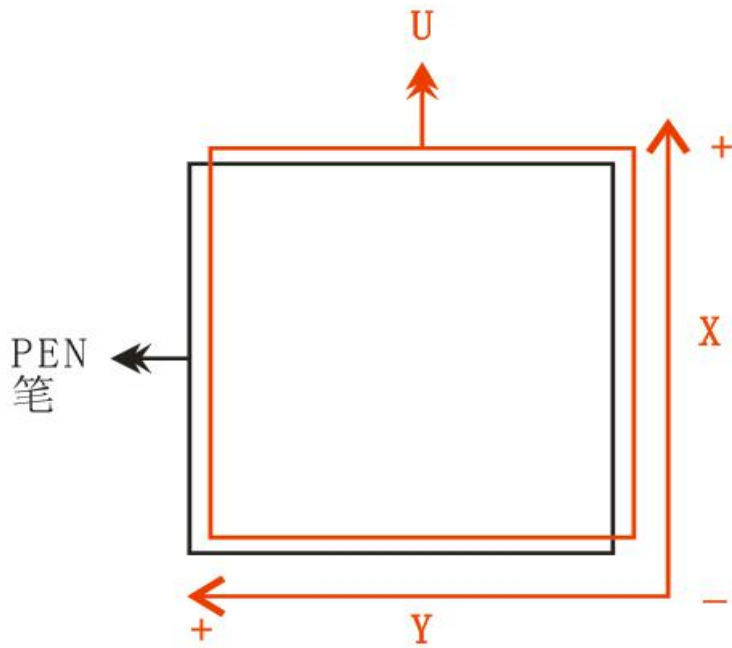
- (3) Adjust the actual cutting size of the machine to be the same as the file design size. Note: It is recommended to use a rectangular pattern when debugging, and the black line in the middle is the design size.



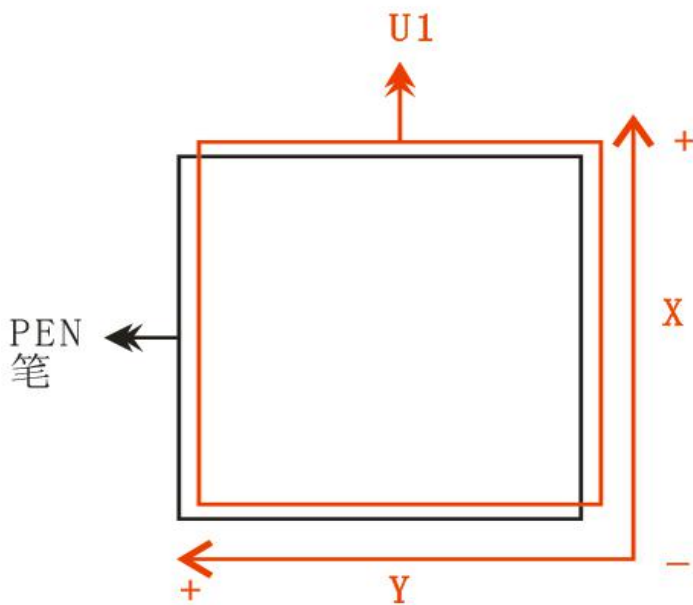
- (4) It is used to adjust the running origin of the pen tool to coincide with the origin of the cursor. It is recommended to use a rectangular pattern when debugging.



- (5) Used to adjust the running deviation of the pen tool and U tool. It is recommended to use rectangular pattern when debugging.



- (6) Used to adjust the running deviation of the pen tool and U1 tool. It is recommended to use rectangular pattern when debugging.



- (7) Adjust pen, U, U1 tool lifting delay, only for special materials, do not change it.
 (8) POT move speed/acceleration, reference data: 100/1500

6-4-3. Function

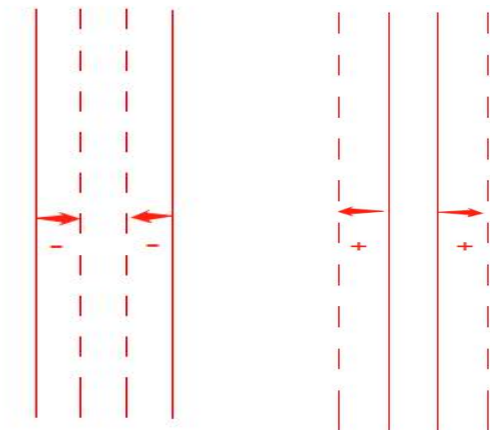
Function parameter

Speed	Offset	Function	Back
Send Speed : <input style="width: 50px;" type="text" value="1234"/>	V-Cut Rake: <input style="width: 50px;" type="text" value="12.3"/>		
Send Acc : <input style="width: 50px;" type="text" value="1234"/>	V-Cut offset 1: <input style="width: 50px;" type="text" value="12.3"/>		
Send Offset : <input style="width: 50px;" type="text" value="12.3"/>	V-Cut offset 2: <input style="width: 50px;" type="text" value="12.3"/>		
Punm Delay : <input style="width: 50px;" type="text" value="12"/>	V-Cut Compesation: <input style="width: 50px;" type="text" value="1.2"/>		
Diffent Deep Cut: <input type="button" value="OFF"/> Cut Times: <input style="width: 50px;" type="text" value="123"/> Thickness: <input style="width: 50px;" type="text" value="12.34"/>			
Auto Send Position : X1 <input style="width: 50px;" type="text" value="1234"/> Y1 <input style="width: 50px;" type="text" value="1234"/> X2 <input style="width: 50px;" type="text" value="1234"/>			

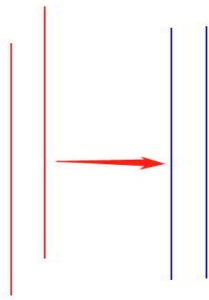
(1) It is used to adjust the speed of conveying materials after cutting in rolling mode. The send offset is set for elastic materials. The pump delay is adjusted according to the length of the air pump pipe. The longer the pipe length, the greater the numerical value.

(2) Used for adjusting V-CUT parameter

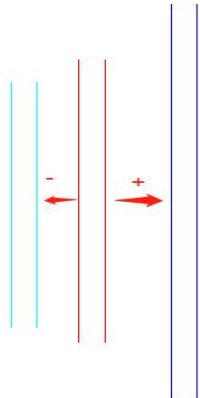
- ❖ V-CUT rake, generally set 45 degrees, the specific angle is adjusted according to the actual situation.
- ❖ V-CUT offset1: It is recommended to use a thin piece of paper for testing. Reference value between 16-20.



- ❖ V-CUT offset2: Adjust the parameters so that the perfect V-groove can be cut when cutting back and forth. If it is 45 degrees V-groove, the V blade value is set to 0.



- ❖ V-cut compensation: Used to adjust the cutting length of V-cut. Please adjust according to product requirements.



(3) Different deep cut: It is used to cut materials with large thickness or high hardness, such as acrylic and PVC plates with a thickness of more than 1CM. If it is difficult to complete the first cut or the effect is not good, we can cut it multiple times. When using it, first turn on the switch, set cut times and approximate thickness of the material. After cutting, you need to turn off the switch.

(4) Auto send position: Check whether the rolling distance of the table is appropriate when automatically send materials.

6-5. Advance

6-5-1. "Tools" setting

(Note: Please don't change without content of supplier)

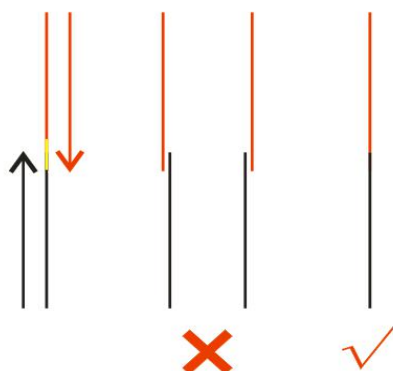
Tools				
Tools	Accuracy	Function	Advance	Back
ECT Down Speed:	123	ECT Down Accel: 1	1234	POT Down Speed: 123
CT Down Speed:	123	CT Down Accel: 2	1234	POT Down Accel: 7 1234
JRT Down Speed:	123	JRT Down Accel: 3	1234	
KCT Cut Down Speed:	123	KCT Down Accel: 4	1234	
DRT Down Speed:	123	DRT Down Accel: 5	1234	
VCUT Down Speed:	123	VCUT Down Accel: 6	1234	

ECT Down Speed / ECT Down Accel: the up / down speed of EOT / UCT tool;
 CT Down Speed / CT Down Accel: the up / down speed of CT tool;
 URT Down Speed / URT Down Accel: the up / down speed of URT tool;
 KCT Down Speed / KCT Down Accel: the up / down speed of KCT tool;
 DRT Down Speed / DRT Down Accel: the up / down speed of DRT tool;
 VCUT Down Speed / VCUT Down Accel: the up / down speed of VCUT tool;
 POT Down Speed / POT Down Accel: the up / down speed of POT tool;

6-5-2. Accuracy

Accuracy				
Tools	Accuracy	Function	Advance	Back
Half Cut Compensation: 1	1.2	EOT Offset:	1.23	
U Deep Limit:	12.34	UCT Offset:	1.23	
U1 Deep Limit: 2	12.34	CT Offset: 6	1.23	
Gradient: 3	12.3	DRT Offset:	1.23	
Pump Delay: 4	123	POT Offset:	1.23	
Router CIR Delay: 5	1234			

- (1) Half cut Compensation: For old type KCT tool, no use for new type KCT tool;
- (2) U Deep Limit / U1 Deep Limit: The max. deep limit of tools for protect the cutting table. The value is cutting depth + 1mm.
- (3) Gradient: The software corrects the mechanical perpendicularity of XY coordinate. (no change allowed)
- (4) Pump Delay: It is used to adjust the waiting time between file transfer and machine operation.
- (5) Router CIR delay: It is used to adjust the running time when the speed of URT tool reaches the peak value.
- (6) EOT Offset/ UCT Offset/ CT Offset/ DRT Offset/ POT Offset: Adjust the mechanical error that the back and forth operation interface of each tool cannot be connected. Note: when adjusting the value, please gradually increase or decrease by 0.05 value each time.



6-5-3. Function

Advance Parameter

Tools	Accuracy	Function	Advance	Back	
Canadian plus speed:	12345	U Rotate Accel:	1234	ARC Speed:	12
Turn Angle:	123. 4	U1 Rotate Accel:	1234	Turning Speed Multiple:	1. 2
Pen stop Angle:	12. 3	Rotate Low Speed:	1234	Synchronous Coefficient:	12
Cut stop Angle:	12. 3	Tools Down Start Speed:	123	Repeat Cut SW:	OFF
U Rotate Speed:	123	Initial cutting speed	123	Set Times:	1234
U1 Rotate Speed:	123	Optimize length:	12	Finished Times:	1234

- ❖ Canadian plus speed: it is used to accelerate the machine in a straight line. Reference value is 3
- ❖ Turn angle: set the maximum angle of tool lifting. Reference value is 30
- ❖ Pen stop angle: mainly used to slow down when running arc.
- ❖ U. U1 rotate speed/acceleration: U, U1 tool rotation speed, non-technical personnel shall not change.
- ❖ Initial speed of rotation: increase the initial speed of rotation, which shall not be changed by non-technical personnel.
- ❖ Tools down start speed: the initial speed of up and down operation of u and U1 shall be increased, which shall not be changed by non-technical personnel.
- ❖ Initial cutting speed: improve the initial speed of each tool when working, and non-technical personnel shall not change it.
- ❖ Optimize length: used for cutting arc to reduce speed.
- ❖ ARC speed: set the arc cutting speed. The higher the value is, the faster the arc running speed is. The value needs to be controlled at 5-8
- ❖ Turning speed multiple: to improve the speed of arc running, the value must be controlled between 2-4.
- ❖ Synchronization coefficient: used to control the arc running speed. The larger the value is, the slower the arc running speed is. The value must be controlled between 6-10
- ❖ Repeated cut SW: used for rolling and circular cutting of unmarked point materials without page file consistency. Requirement: the maximum range of X direction of the document is less than the maximum range of machine operation, and the number of completion must be less than the set number.

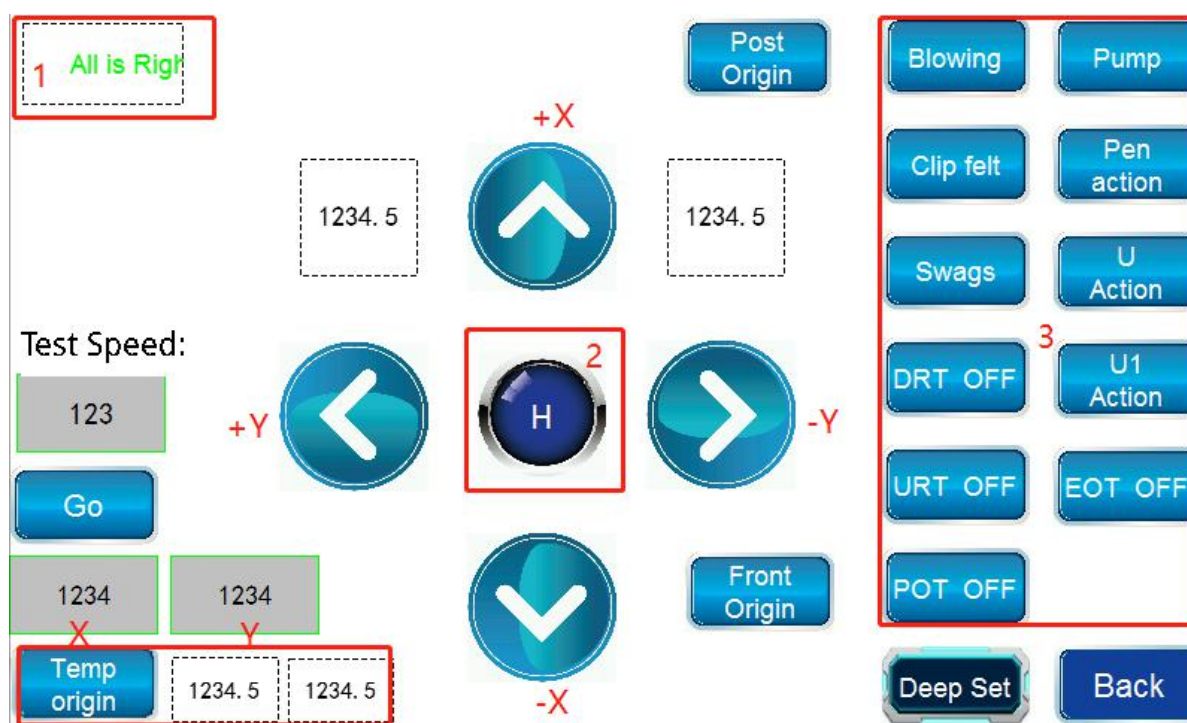
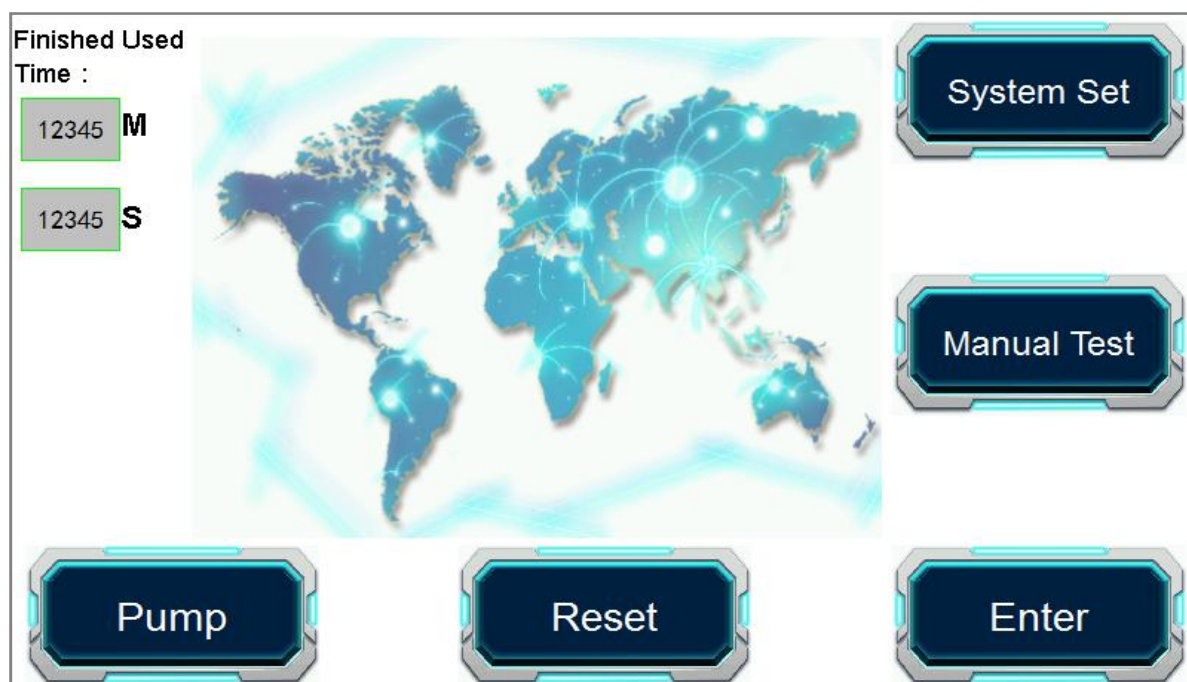
6-5-4. Advance

Advance Parameter

Tools	Accuracy	Function	Advance	Back	
Machine Type:	B4-1013	Safety Switch:	OFF	Recipe switch:	OFF
Language:	Chinese	Servo Alarm:	OFF	Return Defelt:	Reset Default
Auto Repeat:	OFF	Pause Function:	OFF	Temp origin Switch:	OFF
Auto Return:	OFF	Router Alarm:	OFF	PG Switch:	OFF
Auto Deep Switch:	OFF				
IP Address:	123	123	123	123	Enter
				Version:	1.234

- ❖ Machine type: the correct model of the machine shall not be changed at will.
- ❖ Safety switch: the safety protection sensor working switch for the left and right sides of the machine. It is recommended that the safety of the operator can be protected by turning on the machine.
- ❖ Recipe switch: normally closed. Special machines need to ask our technicians.
- ❖ Language: used to change the display text of the system.
- ❖ Servo alarm: normally open is recommended. If the machine servo motor gives an alarm, the machine will stop running
- ❖ Return default: back all parameter to default, please do not touch.
- ❖ Auto repeat: do not turn on the debugging test switch.
- ❖ Pause function: four pause switches around the machine, when pressed, the machine is in the pause state.
- ❖ Temp origin switch: save the coordinates of the temporary origin set for cutting materials without marking points, which will not be lost after power failure or shutdown. You can continue to run at the original temporary origin. Mainly used for unmarked point file cutting.
- ❖ Auto return to the origin: when the machine file is finished running, it will automatically return to the X maximum coordinate point. It is mainly used for cutting without mark point file. Do not open marked cutting.
- ❖ Router alarm: when the milling cutter driver gives an alarm when the milling cutter is running, the machine will stop running.
- ❖ PG switch: when the machine file is running, the touch screen will prompt whether to continue. It is mainly used for cutting without mark point file. Do not open marked cutting.
- ❖ Auto deep switch: it will turn on the automatic tool setting function. Please determine in advance whether your equipment has automatic tool setting configuration.
- ❖ IP address: display and change the IP address of the machine. Please restart the machine after the change. It must be in the same network segment as computer IP and camera IP.

6-6. Manual Test



- (1) Machine warning window: which is used to eliminate basic faults of equipment
- (2) Switch between high speed and low speed when using the direction keyboard to move the machine. The test speed shows the moving speed at high speed, with the value range of 100-500
- (3) It is mainly used for testing various switches and tools.

GO: enter fixed coordinates to move the cursor point to the set coordinate position.

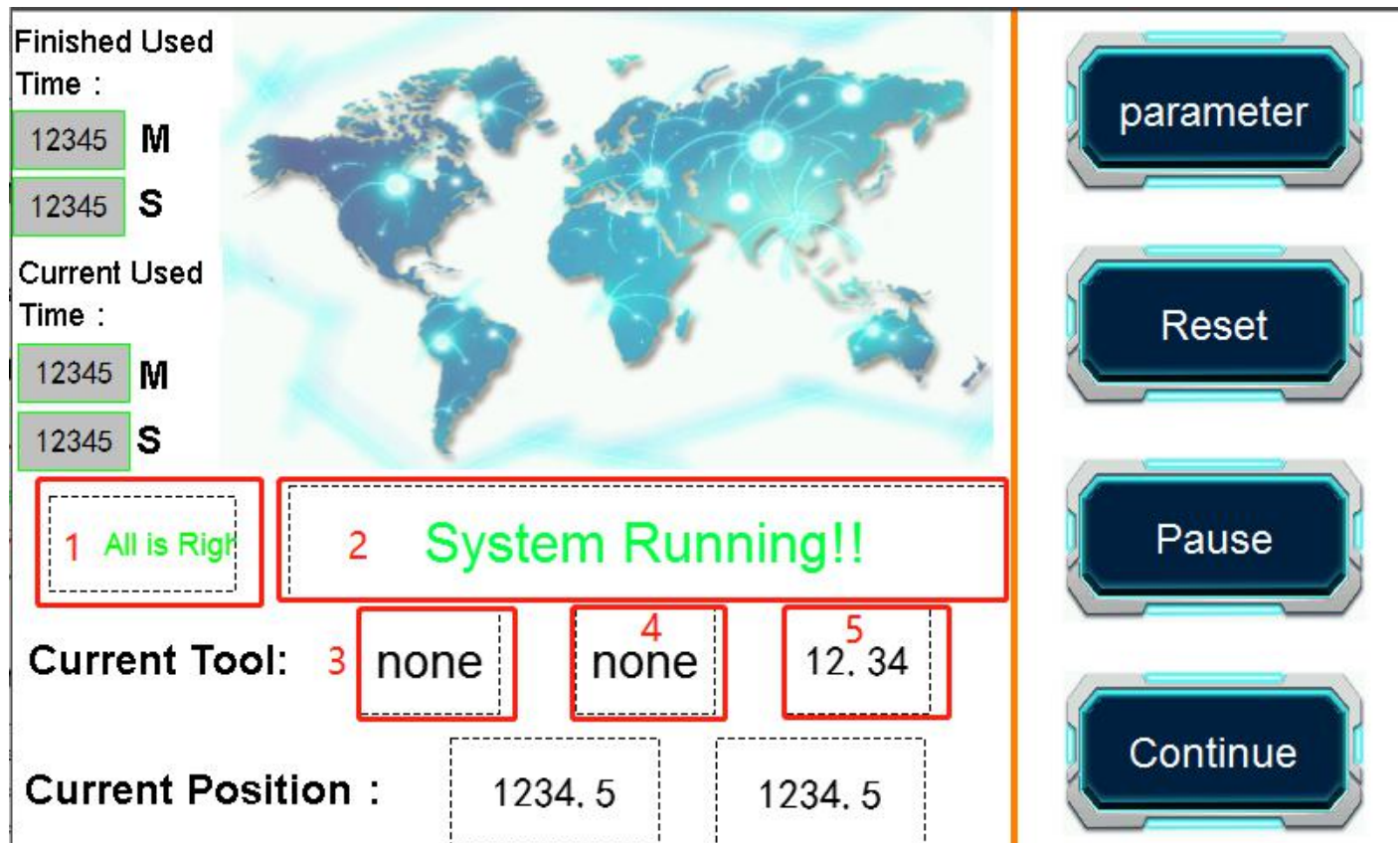
Temp origin: mainly used to set the temporary starting point when cutting materials without punctuation. If the temporary origin saving in advanced settings is not turned on, the temporary origin will automatically change to 0 after the machine is reset

Post origin: click the button to move the head position to x Max coordinate.

Front origin: click the button and the head position will move to 0 coordinate immediately

Deep set: adjust the depth of u and U1 tools, including automatic tool setting and manual tool setting interfaces.

6-7. System running



- (1) Machine alarm display bar
- (2) System operation status display
- (3) Display the serial number of the currently running sp
- (4) Display of current tool operation
- (5) Display of current tool depth

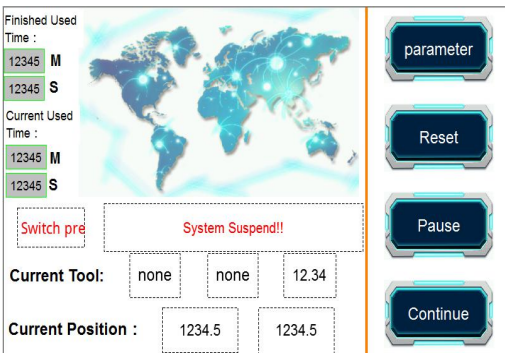
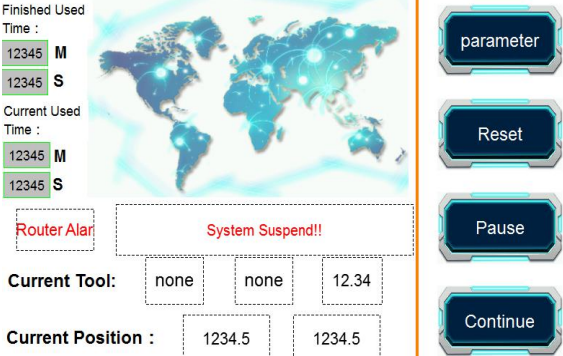
Parameter: click the pause button before you can enter. It is mainly used to change the parameters such as tool depth and running speed during equipment operation.

Reset: after clicking, the machine will reset the cancelled file operation to zero coordinate.

Pause: Click once to enter the pause state. Clicking twice in a row will cancel the current file operation, and the next file will be run after stopping.

Continue: when the system is in a suspended state, clicking continue will automatically continue the operation of the system

6-7. Alarm interface

Alarm	Solution
 <p>Finished Used Time : 12345 M 12345 S</p> <p>Current Used Time : 12345 M 12345 S</p> <p>Switch pre System Suspend!!</p> <p>Current Tool: none none 12.34</p> <p>Current Position : 1234.5 1234.5</p> <p>Buttons: parameter, Reset, Pause, Continue</p>	<p>Check whether the pause switch around the equipment is closed. Or the pause switch has failed.</p>
<p>out of time,please contect the manufacture</p>	<p>Please contact your supplier.</p>
<p>Press Enter to Continue ! !</p> <p>Safety Protected !</p> <p>Enter</p>	<p>Please check whether the alarm of anti-collision switch is blocked or the anti-collision switch is faulty.</p>
<p>Machine going to out of block ,Foreced stop it.</p>	<p>Please check that the location of materials or marked points is beyond the cutting range.</p>
 <p>Finished Used Time : 12345 M 12345 S</p> <p>Current Used Time : 12345 M 12345 S</p> <p>Router Alarm System Suspend!!</p> <p>Current Tool: none none 12.34</p> <p>Current Position : 1234.5 1234.5</p> <p>Buttons: parameter, Reset, Pause, Continue</p>	<p>Please check the alarm condition of the milling cutter driver, or the milling cutter switch is not turned on.</p>

<p>The file is out of the format, please retransmit after reset! ! !</p> <p>Reset</p>	<p>The cutting file exceeds the operating size of the device, or the temporary origin is not set correctly.</p>
<p>Please Restart.....</p>	<p>Check and eliminate the cause of servo driver alarm, then power off and restart</p>

6-8. Recipe function

This function can only be opened if there are special requirements, and it is not open under normal conditions)

Design idea: for cutting according to different materials, the cutting parameters of each material shall be saved separately. When the material is replaced, the parameters shall be read according to different material classification to achieve the purpose of fast switching.

Recipe switch: if you only cut one material, you must turn off the recipe switch. (as below picture)

Advance Parameter					
Tools	Function	Advance	Back		
Machine Type:	B4-1013	Safety Switch:	OFF	Recipe switch:	OFF
Language:	Chinese	Servo Alarm:	OFF	Return Defelt:	Reset Default
Auto Repeat:	OFF	Pause Function:	OFF	Temp origin Switch:	OFF
Auto Return:	OFF	Router Alarm:	OFF	PG Switch:	OFF
Repeat Cut Sv	OFF	Set Times:	####	Finished Times:	1234
IP Address:	###	###	###	###	Enter

Recipe parameter setting:

Function

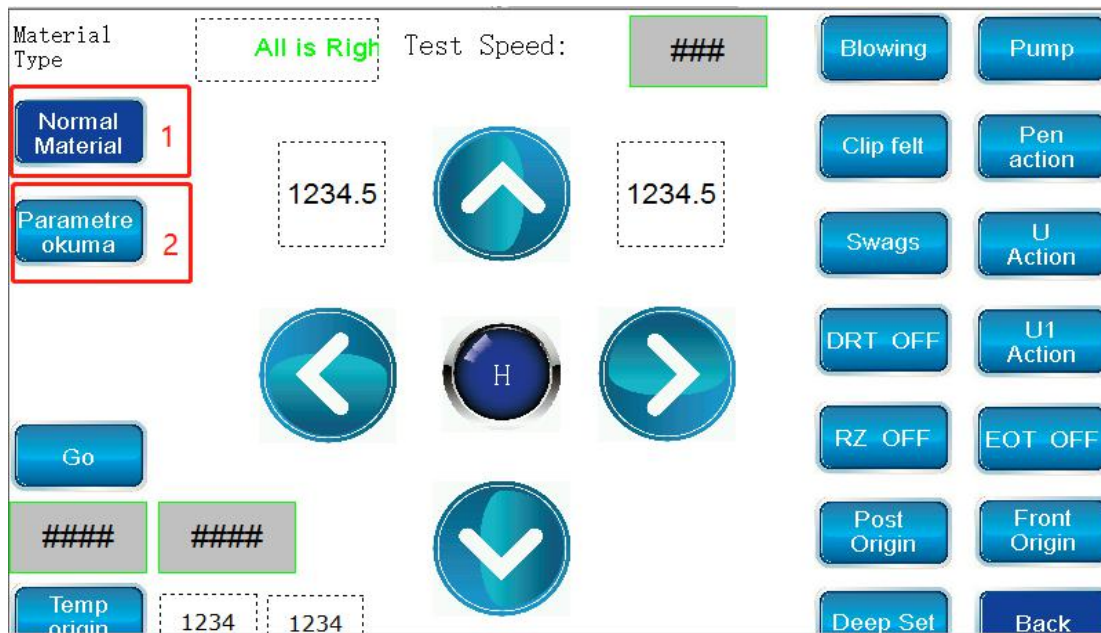
Speed	Offset	Function	Back
Send Speed: <input type="text" value="####"/>	V-Cut Rake: <input type="text" value="##.#"/>	Material type 1 <input type="button" value="Normal Material"/> 2 <input type="button" value="Parameter Save"/> 3 <input type="button" value="Recipe"/>	
Send Acc: <input type="text" value="####"/>	V-Cut offset 1: <input type="text" value="##.#"/>		
Send Offset: <input type="text" value="##.#"/>	V-Cut offset 2: <input type="text" value="##.#"/>		
Punm Delay: <input type="text" value="##"/>	V-Cut Compesation: <input type="text" value="##"/>		
Diffent Deep Cut: <input type="button" value="OFF"/>	Cut Times: <input type="text" value="###"/>	Thickness: <input type="text" value="##.##"/>	
Auto Send Position: <input type="text" value="####"/>	<input type="text" value="####"/>	<input type="text" value="####"/>	

Click the material type button to select materials, click the parameter save to cover parameters, click the formula interface to enter the formula parameter setting interface, and click different materials to set separately.

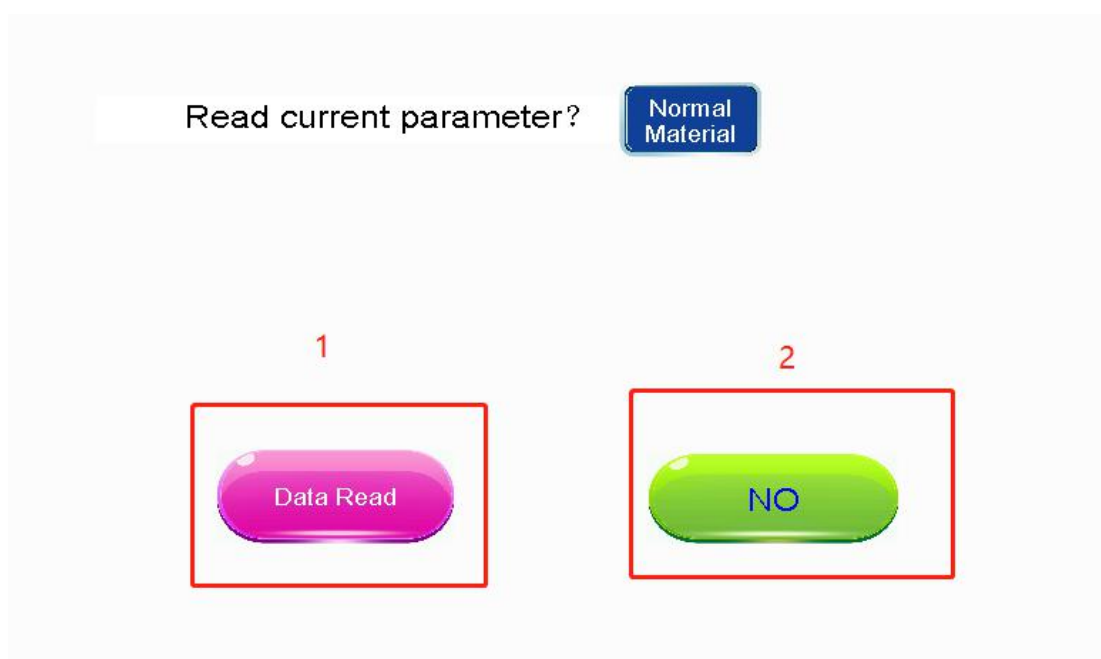
Normal Material	Rolling	KT board	PVC Foam Board	Acrylic	Corrugated Board	Honeycomb Board	Fabric Single-ply	Back
1								
U Tools: <input type="button" value="EOT"/>	Pen Speed: <input type="text" value="####"/>	VCut Speed: <input type="text" value="####"/>						
U1 Tools: <input type="button" value="EOT"/>	Pen Accel: <input type="text" value="####"/>	VCut Accel: <input type="text" value="####"/>						
U UP Depth: <input type="text" value="##.##"/>	EOT Speed: <input type="text" value="####"/>							
U Depth: <input type="text" value="##.##"/>	EOT Accel: <input type="text" value="####"/>							
U1 UP Depth: <input type="text" value="##.##"/>	CT Speed: <input type="text" value="####"/>							
U1 Depth: <input type="text" value="##.##"/>	CT Accel: <input type="text" value="####"/>							
								2
								NEXT

Click position 1 to select different materials for viewing, and 2 is the parameter interface.

Recipe parameter reading



Click the button “Normal Material” for material selection, and then click “Parameter Okuma” for reading recipe after confirmation.



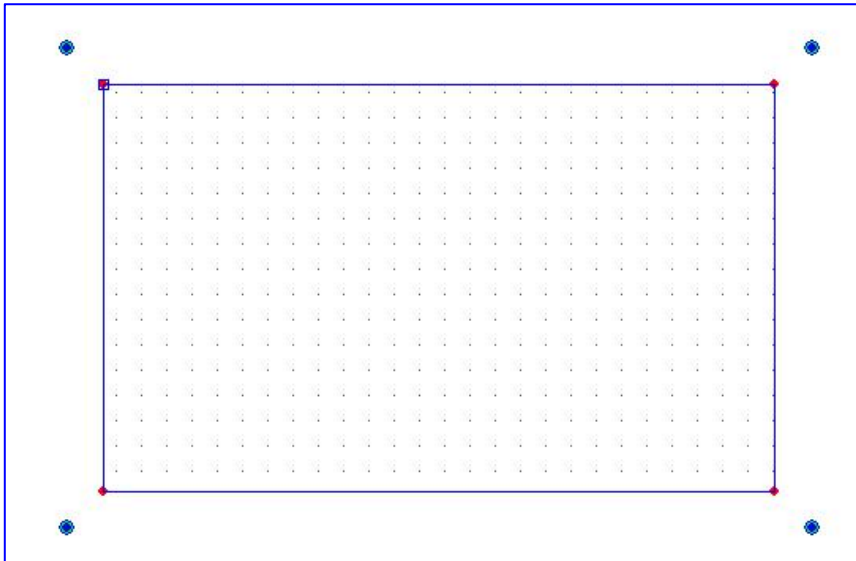
In case of inadvertent mis-operation, click No on the prompt interface.

7 Supplementary description of CCD positioning

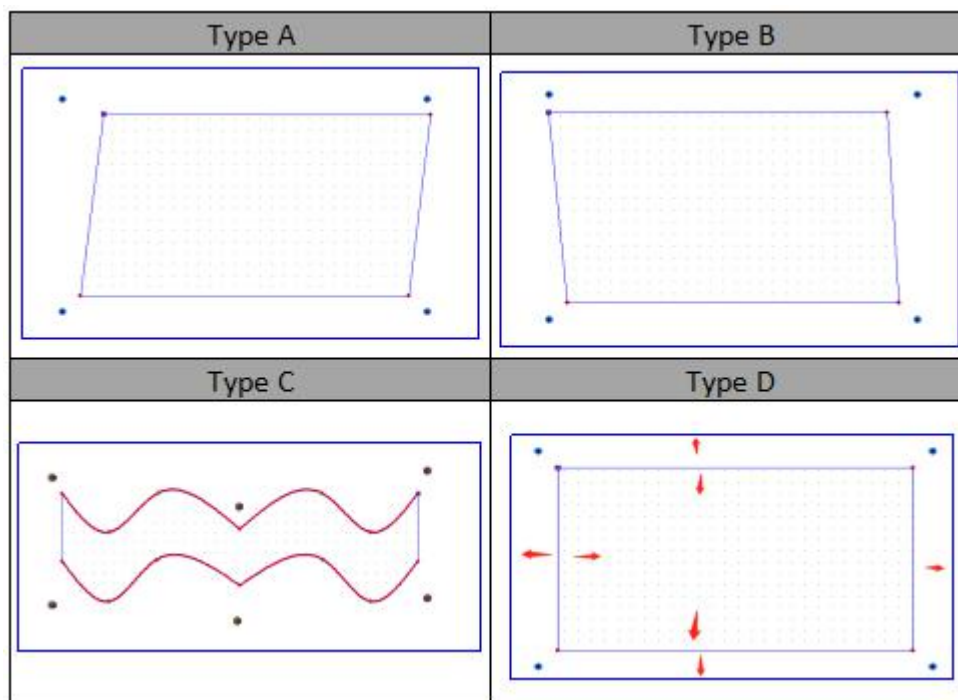
7-1. Error correction of CCD positioning software

CCD positioning and cutting are based on the coordinates between the marked points. When there is an error between the printing position of the marked points and the position of the marked points in the printing map, the cutting will also have an error. Therefore, it is necessary to pay attention to the consistency of point positions when making cutting or printing drawings.

The best Mark position (as below):



Printing error type:



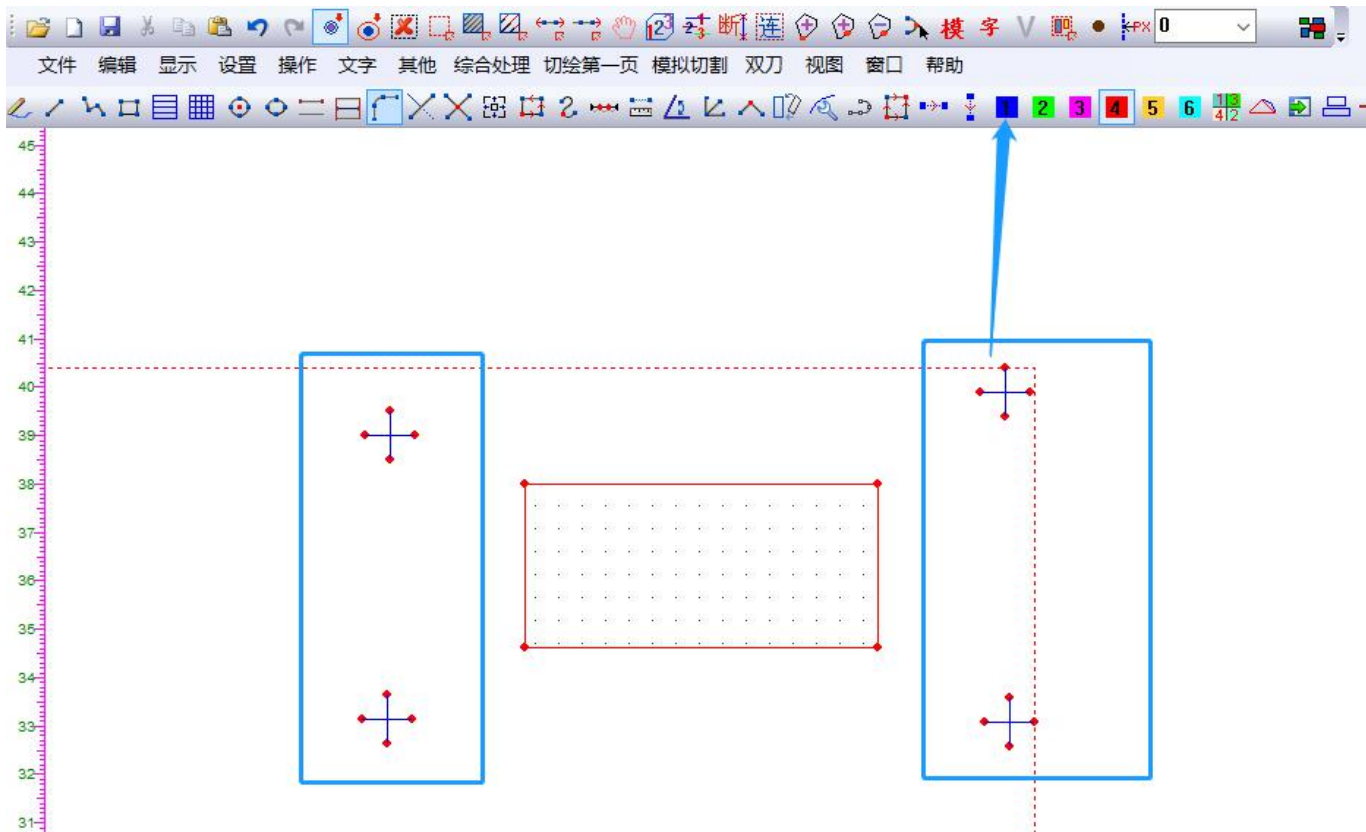
A and B type can be corrected by software;

C type can't be directly corrected. We need to reduce the x-direction placement distance of mark points on each page to improve the accuracy.

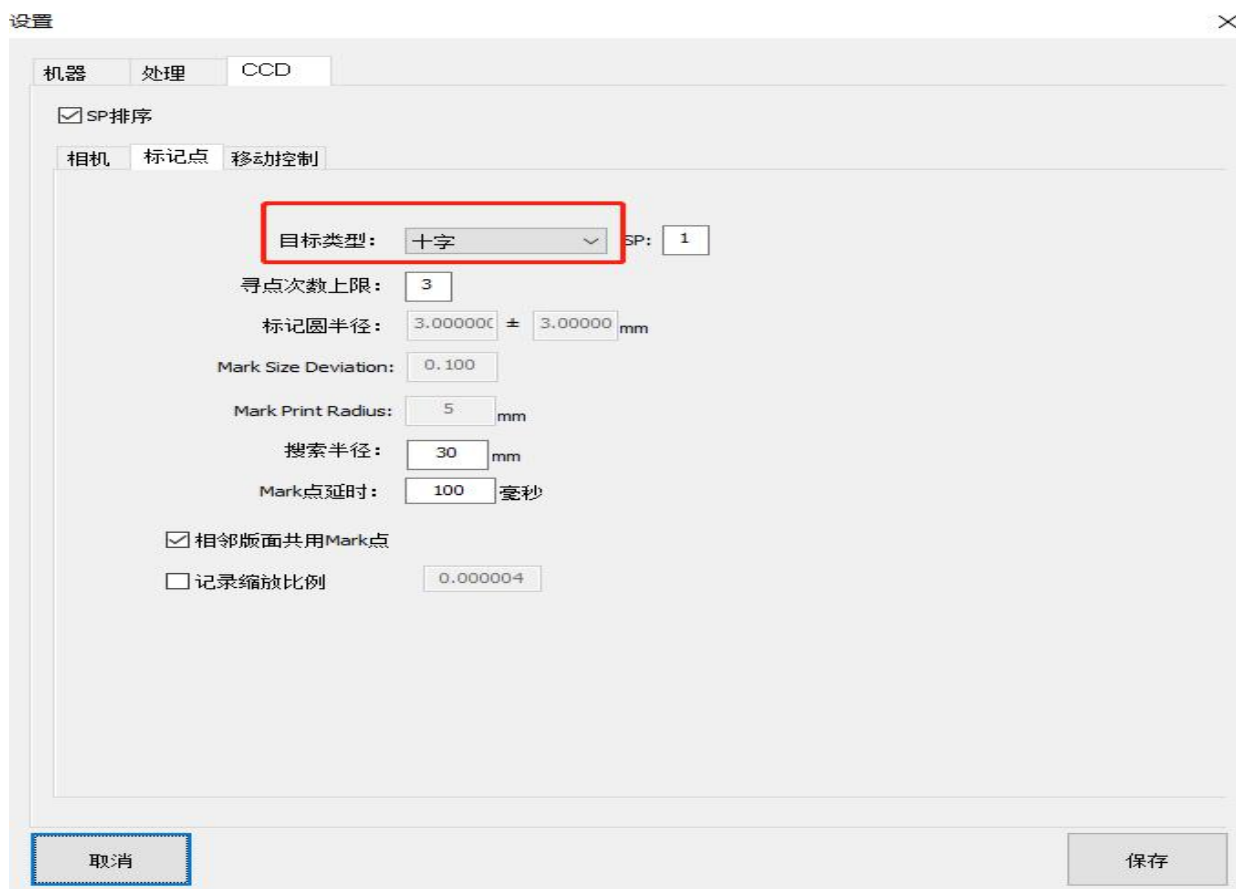
D type can be corrected automatically according to the specific scaling error of the mark point.

7-2. Instructions of cross mark “+”

7-2-1. Check the properties of “+” mark:

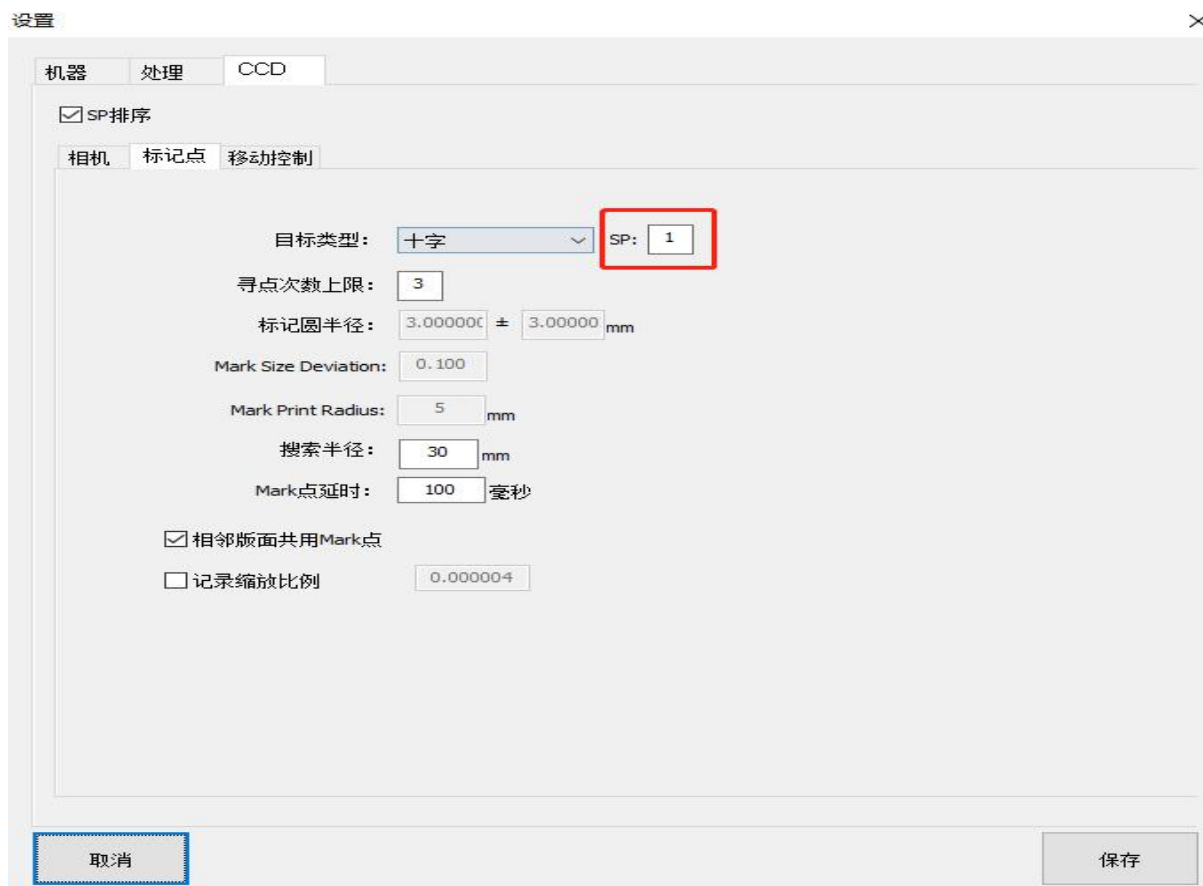


7-2-2. Set the mark type in CCD software as “+” (as below picture).



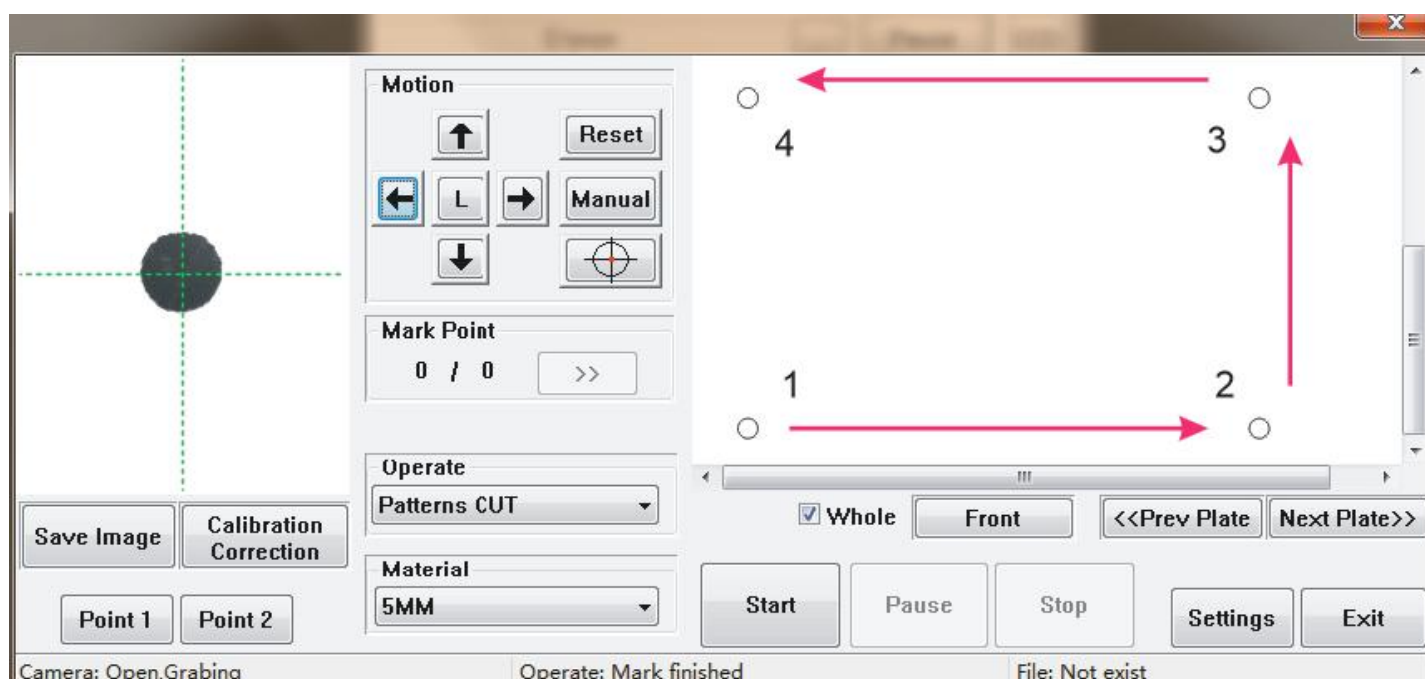
(英文图片)

7-2-3. Change the SP attribute of the marked point. Note that it must be consistent with the serial number of the cross mark point “+”.



7-2-4. Check the software identification.

Note: regardless of the use of dots or cross markers, please pay attention to the identification order of the marker points. If it is not arranged in order counterclockwise, it indicates that there is a problem in the location of the marker points. The number or coordinates of the points that need to be checked. See the figure below:



8 Basic Maintain Instruction

This equipment is a precision mechanical and electrical product, the whole machine includes integrated circuit board and precision machinery, so it must be carefully maintained to prevent various faults and extend the service life of the equipment. Please carry out the maintenance in strict accordance with the maintenance.

Overall equipment maintenance:

Equipment maintenance is to maintain and protect the performance and technical status of the equipment through general methods such as wiping, cleaning, lubrication and adjustment. There are four main requirements for equipment maintenance:

- (1) Clean the inside and outside of the equipment, make sure that there is no oil stain on each sliding surface, no oil leakage or air leakage at each part, and clean the chips, sundries and dirt around the equipment;
- (2) Tools, accessories and workpieces (products) shall be placed in order, and pipes and lines shall be organized;
- (3) Oil filling or changing on time in good lubrication
- (4) Safety operation rules shall be followed, equipment shall not be used overload, safety protection devices of equipment shall be complete and reliable, and unsafe factors shall be eliminated in time.

If you encounter difficulties that cannot be solved, please contact our technical engineer.

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