

## Remarks

When output by USB port

Make sure select the same com port in the device manager and the software.



Set baud rate at 38.4k or 38400 in software.

Note: If settings are incorrect, the machine will not work.










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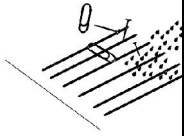



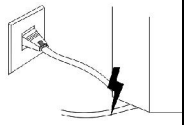

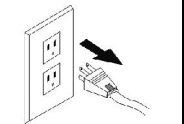





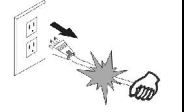

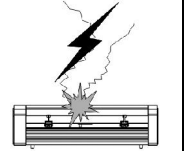

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## 1. Safety precautions

	WARNING	Any improper operation possibly results in hazard of life or damage of equipment..
	CAUTION	Any improper operation possibly results in hazard of life or other objects

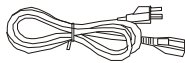




### Definition of sign symbols

	The symbol in the left warns you of electronic shock.
	The symbol specifies the activities to be forbidden. No disassembly
	WARNING
	Don't use the power source not meeting rating voltage, otherwise fire or electronic shock may be resulted in.
	If the machine gives smoke or unpleasing smell or noise, please do not use it, continuing using it may result in fire or electronic shock
	Do not put out the plug when the power is on in order to avoid damage to the machine.
	Make sure electrical grounding when it is working. Otherwise it will cause electric shock or machine can't work normally.
	Don't detach, repair or reconstruct the machine, otherwise fire and electric, hazard of life may be result in.
	CAUTION

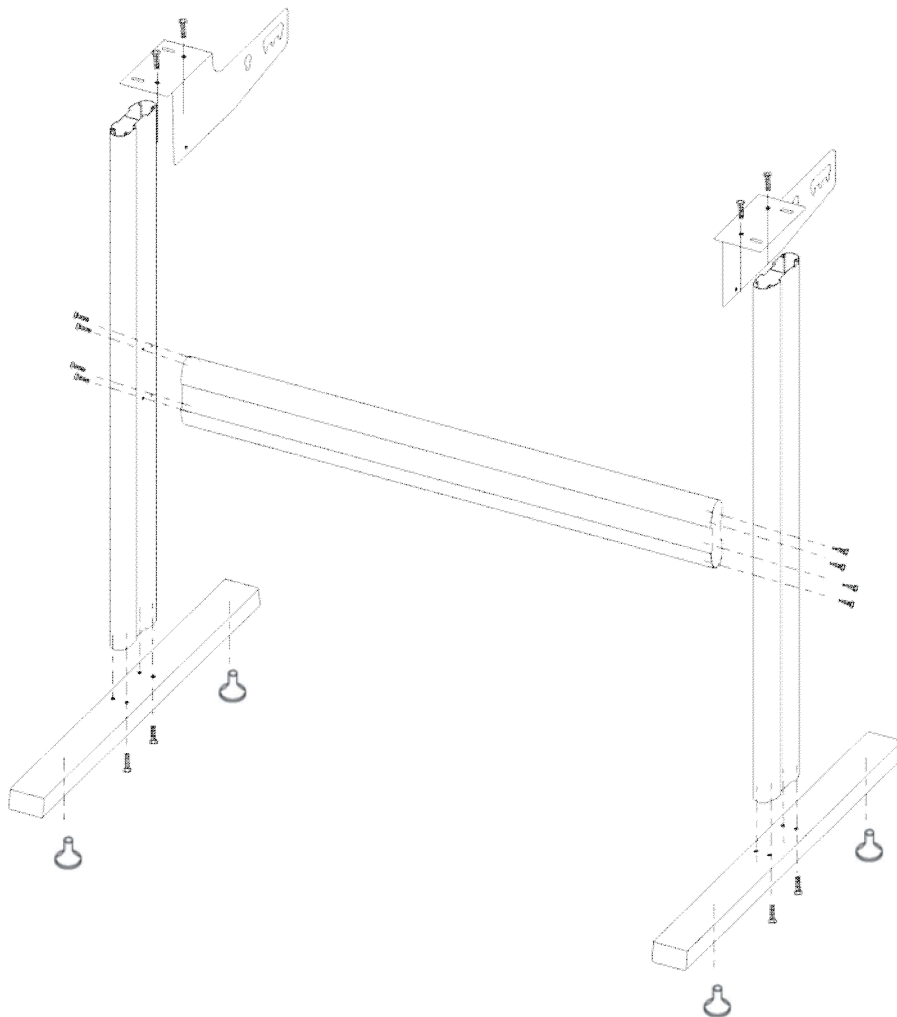
	Don't leak any liquid or drop metal into the machine, such things may result in fire.	
	Don't touch the knife top with your finger to prevent injury or perspiration of knife head.	
	Do not damage or random replace the supplied power cable, do not excessively bend, pull, bundle the power cable or place weight on it. Otherwise the power source may be damaged even fire or electric shock is thus incurred.	
	If you are not going to use the machine for a long time, please unplug the power cable from the replace, otherwise fire possibly happen.	
	When operating the machine, do not place either of your hands on capstan to avoid injury.	
	Place the machine on a stable surface, otherwisethe machine may fall therefore get damaged.	
	To unplug the power cable from socket, please hold the plug instead of the cable. Strongly pulling of the cable possibly result in electric or fire.	
	Any operating is forbidden in case of storm or lighting to prevent damage of the machine.	
	In order to avoid the damage of the main board, please do not move the carriage by hand!	

## 2. Accessories coming with cutter

Please check the following accessories after unpacking, please contact the seller or our company if you find anything missing.

Item:	Parts	Quantity	Picture
1	Power cable	1	
2	USB cable	1	
3	Serial cable	1	
4	Blade holder	1	
5	Blade	3	
6	Pen holder	1	
7	Color plot pen	6	
8	D card	1	
9	Cable for D card download	1	
10	Bluetooth adapter	1	
11	Manual	1	
12	certification	1	
13	Warranty card	1	
14	M bracket	1	optional
15	stands	1	optional

Installation instruction of stands.(Stands of CB1300 is standard configuration, Stands of CB730 is optional)



Take out every parts of the stand from the packing box,install the stand according to the picture above. Lay the cutter on the stand after installation, aim at and install screw holel, then tighten up the screw.

### 3. Installation

#### 3.1 Installation and connections



#### WARNING



Make sure machine is grounded, otherwise electric shock or mechanic default is possibly resulted in.



Don't use the power source not meeting rating voltage. Using the wrong power source may result in fire or electric shock.



Don't pull out the plug when the power is on to avoid damage to the machine.

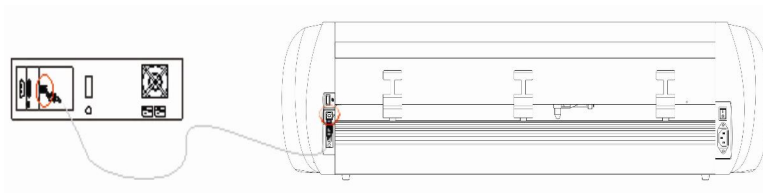


Place the machine on a stable surface, otherwise the machine may fall therefore get damaged.

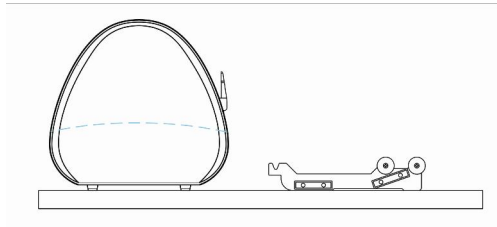


3.1.1 Place the cutter in a plane and roomy place

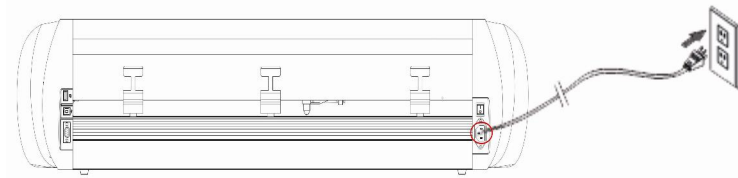
3.1.2 Connect the cutter with computer by USB cable.



3.1.3 Place the bracket behind the host machine, and ensure it is parallel to the host machine.



3.1.4 Check power and voltage, whether it is grounded, do not connect to power until all parts in a good condition



### 3.2 Installation cutting tool



CAUTION

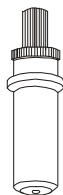


Don't touch the knife top with your finger to prevent injury.

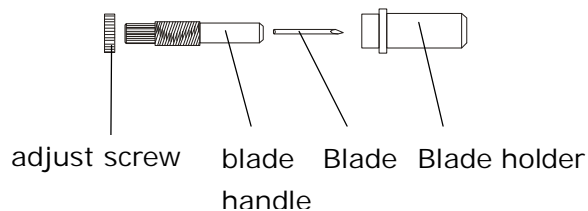


3.2.1 Fit cutter knife into rotary tool, the knife are as shown in following drawings:

(front view)

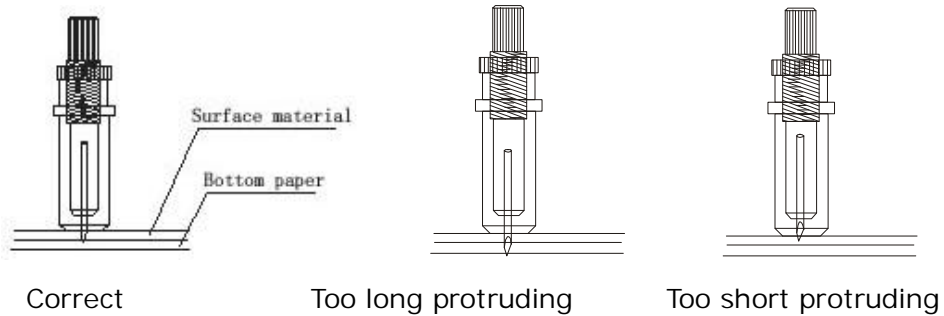


(disassembly view)



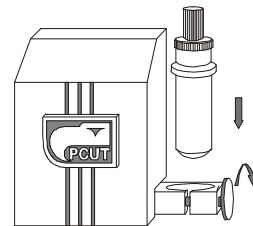
3.2.2 Adjust the protruding length of the knife point for specific cutting media.






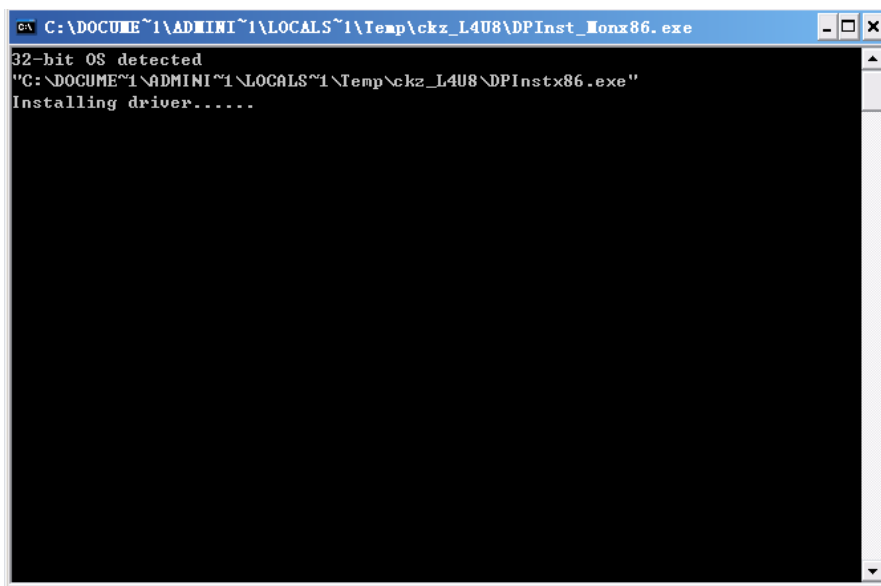
### 3.2.3 Installation of blade holder

- (1) Loosen the screw Of blade holder bracket
- (2) put the holder into the bracket
- (3) When the holder is in appropriate position, Tighten up the screw.



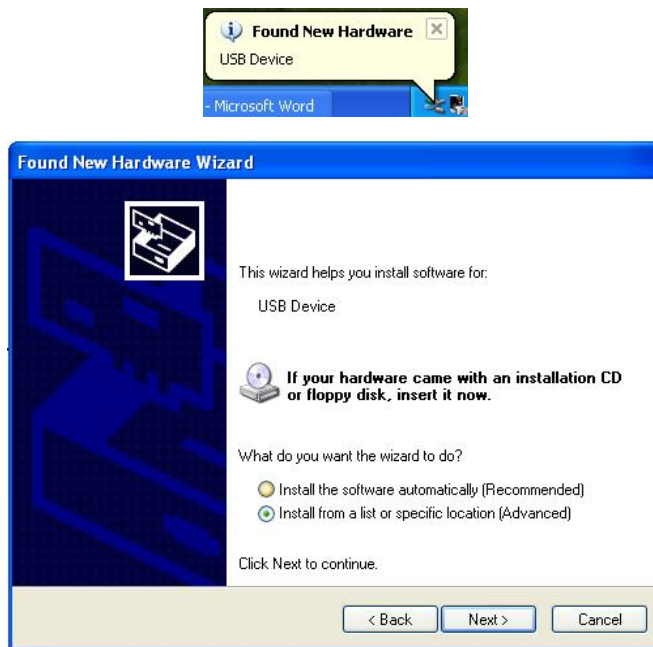
## 3.3 Installation of USB Driver

3.3.1 Insert the driver CD into the computer, find the folder with driver in , then double click the  CDM20802\_Setup.exe file, the computer will display as follows:

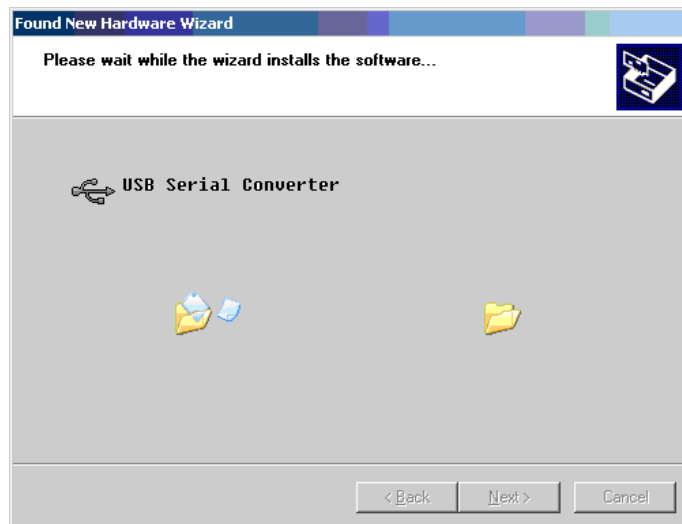


After the driver installation, it will close automatically.

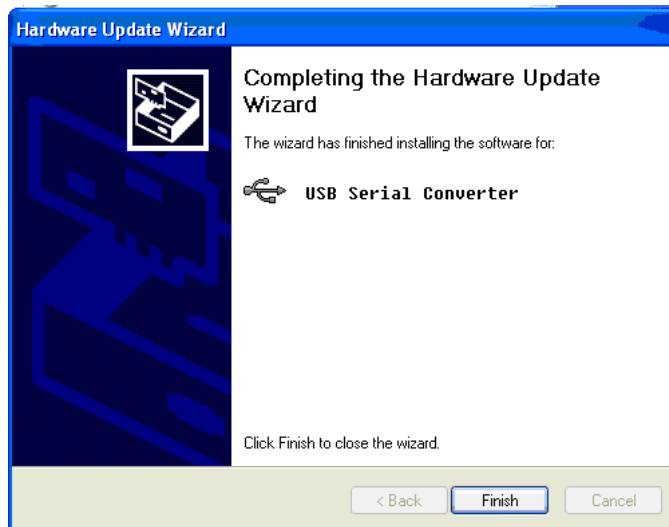
3.3.2. Connect the plotter to the computer with USB cable , turn on the power of plotter, computer will show the following dialog box.



Select the "Run automatically", click "next", it will show as below



When installation finished, Computer will show dialog as below:



Click "Finish", withdraw the dialog box.

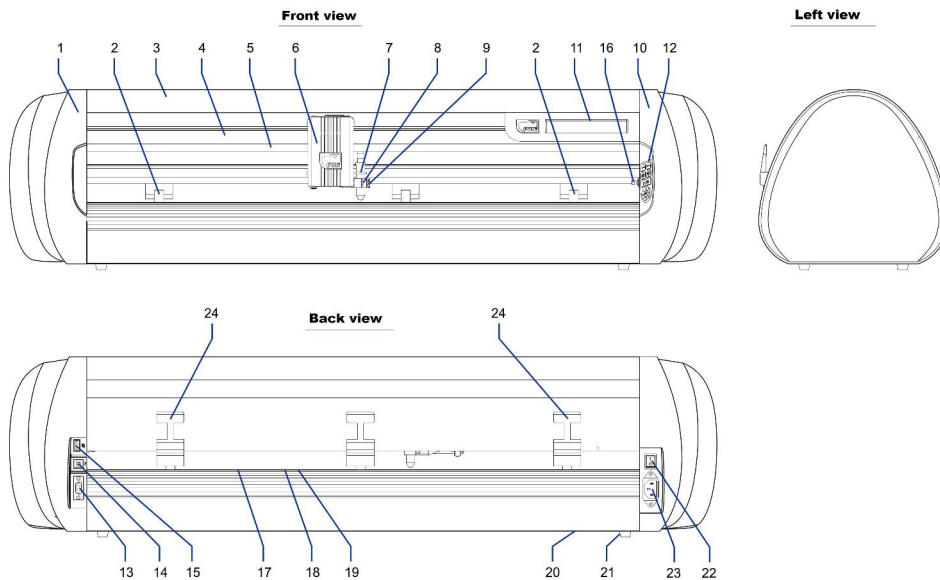
3.3.3 After you success to install the USB driver.

you can see a new "usb serial port(COM8)" list under the "port(com and LPT)" in device manager.

## 4. Details operating instructions

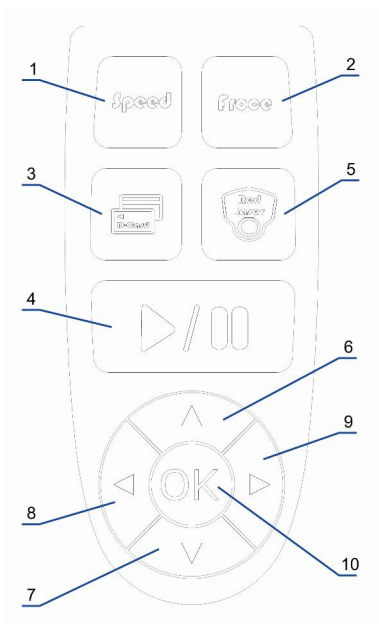
### 4.1 Part's name and function

#### 4.1.1 outside view



- |                       |                             |
|-----------------------|-----------------------------|
| 1.left cover          | 13.serial port              |
| 2.pinch roller        | 14.USB port                 |
| 3.upper cover         | 15.D card port              |
| 4.beam                | 16.limit switch             |
| 5.carriage belt       | 17.cutting slot             |
| 6.carriage            | 18. guiding roll/main shaft |
| 7.blade holder        | 19.scale                    |
| 8.blade bracket/clip  | 20.bottom board             |
| 9.adjust screw        | (power and fan in side)     |
| 10.right cover        | 21.food pad                 |
| 11.LCD screen         | 22.power switch             |
| 12.button panel/board | 23.power socket             |
|                       | 24.pinch roller holder      |

### 4.1.2 Button



1. speed
2. force
3. D card
4. pause/continue
5. red eye
6. up
7. down
8. left
9. right
10. ok

## 4.2 Basic Operation



### CAUTION



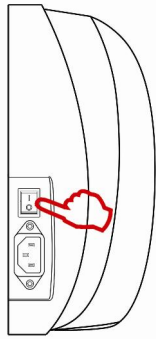
When switch on the Power, make sure your hands and other articles are far away from running parts such as guiding roll and carriage to prevent injury



#### 4.2.1 turn on machine

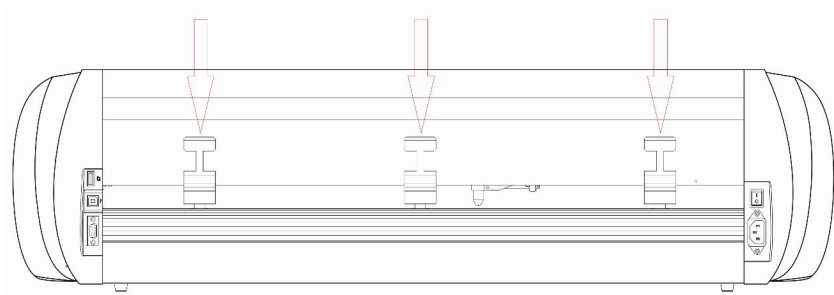
4.2.1.1 Check if the power is in OFF state

4.2.1.2 Plug the power cable to the power socket of the cutter, press down the power switch.

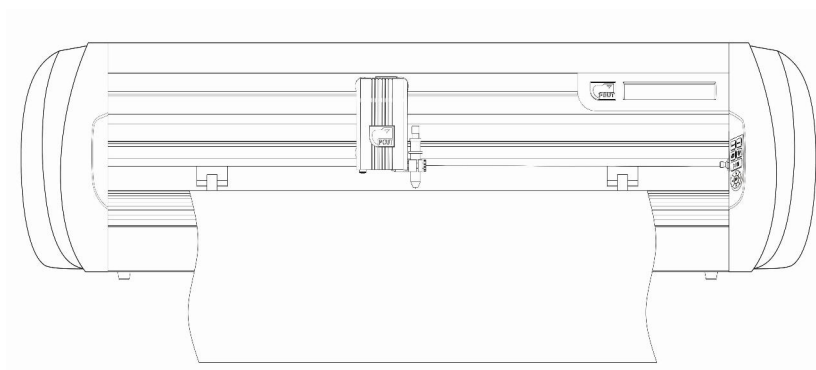


4.2.2 Install the cutting media You can use single-sheet media or a roll of media.

4.2.2.1 Press down the handle of pinch roller holder behind the machine to raise the roller



4.2.2.2 Insert the media into the space between roller and guiding roll, pull out the media to appropriate length from the front of the cutter.

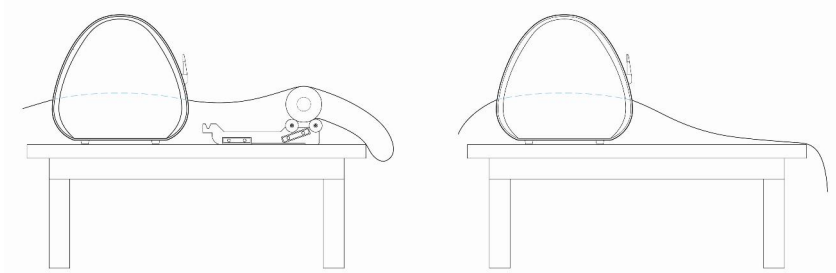


Use roll of media

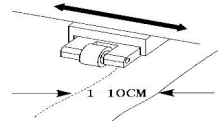
Pulling out to required length

Use single sheet of media

Cut required length from media roll



- 4.2.2.3 Adjust pinch roller's position according to the width of paper, the roller should be set at least 10CM from the paper edge to ensure good paper running



- 4.2.2.4 Raise the handles of pinch roller holder, to make pinch roller press paper media tightly

- 4.2.3 Blade trial (adjusting blade pressure and blade)



#### CAUTION

Do not touch the knife tip with your finger to prevent injury.



blade quality directly effect the cutting precision and cutter's life . To be better, please use the standard blades we provide, never use those with poor quality. This may cause the damage to the blade holder

## 4.3 Operating instruction

### 4.3.1 information on LCD when turn on



Picture above display brand and cutter model (pcut cb730 for example)



Picture above display mother board version (V000.4)

### 4.3.2 normal start information




- Picture above display coordinates, pressure, seed

### 4.3.3 speed adjustment


Press speed  button, go to seed mode



In this mode, press  to raise speed, press  to decrease speed,




press  back to coordinates state

### 4.3.4 blade force adjustment


Press  go to force state, gram as the unit






In this mode, press  to rise force, press  to decrease force, press  back to coordinates state




#### 4.3.5 force test

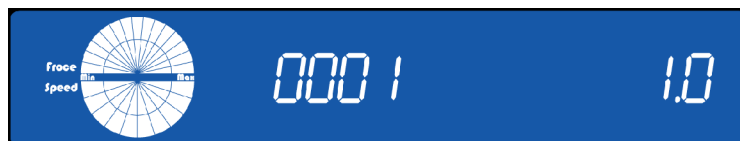
In the coordinates state ,press , the machine will automatically cut a small square from the media. Check if the current pressure suite the media.




#### 4.3.6 D card usage

In sert the Dcard to the port, press ,go to Dcard mode



In this mode,number in left is the serial number of the file , number in right is the total numbers of the file, press  go to above file number, press  to go to below file number, press  choose the current file number, then go to picture mode,see below picture



In this mode,number in left is file number,number in right is picture proportion,1.0 is default,means same size with the original picture.press  picture proportion increase 0.1,press ,picture proportion decrease 0.1.press confirm cutter will work this picture in current proportion.



#### 4.3.7 Working state and pause, machine has three working states

##### 4.3.7.1 USB/COM working state



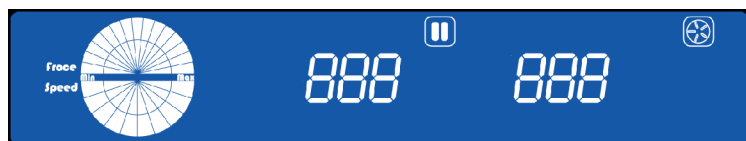
##### 4.3.7.2 blue tooth working state








##### 4.3.7.3 D card working state



In any state, if you press  machine will go to pause state

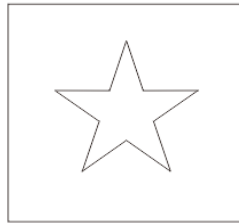



Under this mode, number at left is blade force value, number at right is speed value, press  increase blade force, press  decrease the blade force, press  increase the speed, press  decrease the speed. Again press  cutter back to working state.




Note: in this mode, force and speed can be directly saved by using arrow keys




#### 4.3.8 Usage of laser point function

First,design a picture in software, coreldraw 12 for example, add a square to the picture.



Print this picture,can not change the size when printing, press  ,cutter's

laser will turn on, icon  will flash, then you feed the picture material to the cutter ,to align the laser point to the cross point at the bottom right of the square,this point is the original point, press  the laser point will move automatically to the left, move the paper, make sure laser point move exactly on the bottom line, when laser point move to the far left, it will back to original point automatically,(or you can press reset/limit button,laser point will come back when you want) then you have another chance to adjust the line.make laser point perfect move on this line. if they are not adjusted well, you can not cut good job. please press  and try again by repeating those steps.

After you finish it and carriage stop ,press ,the icon  on the LCD will be offen bright instead of flash,then you can select this file and start to cut,you can press  to exit laser point mode

#### 4.4 Connect the Bluetooth adapter to machine

4.4.1. Insert the Bluetooth adapter into the USB port,system will automatically install the driver,you can see the Bluetooth icon at the right of taskbar



You can find the Bluetooth radios in the device manager.



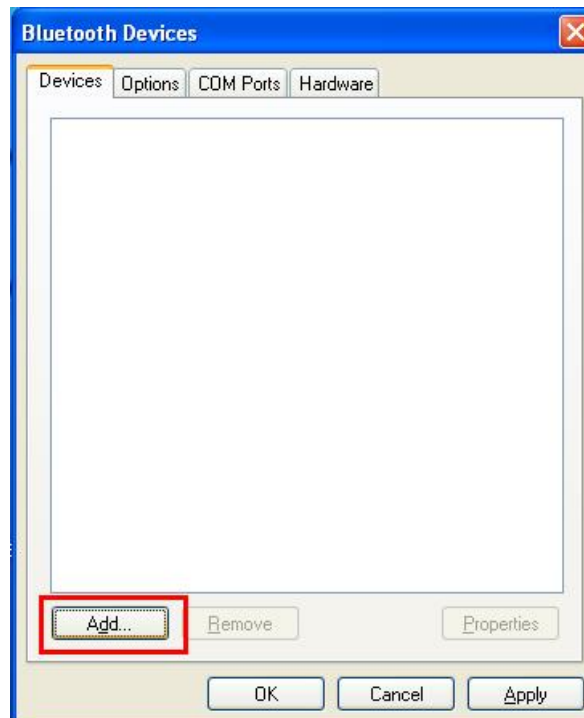
4.4.2. Right click the Bluetooth icon in the taskbar, select open Bluetooth settings.



Choose "options" when pop up the follow dialog, select show the Bluetooth icon in the notification area. (if do this, when Bluetooth adapter insert, it will show the Bluetooth icon in the taskbar)



4.4.3. switch on the power of cutter, select "devices" option, click "add" button



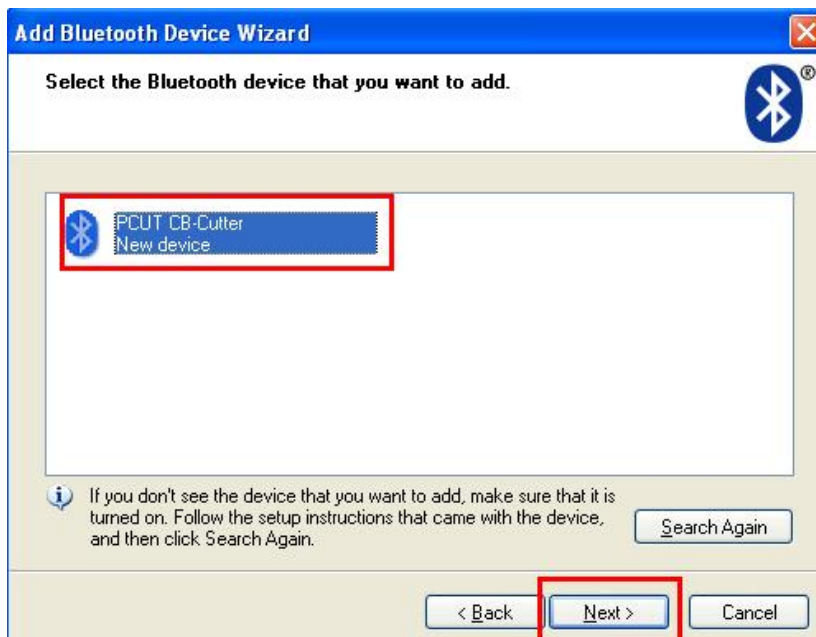
Select "my device is set up and ready to be found" in the pop up guide dialog,click the next step



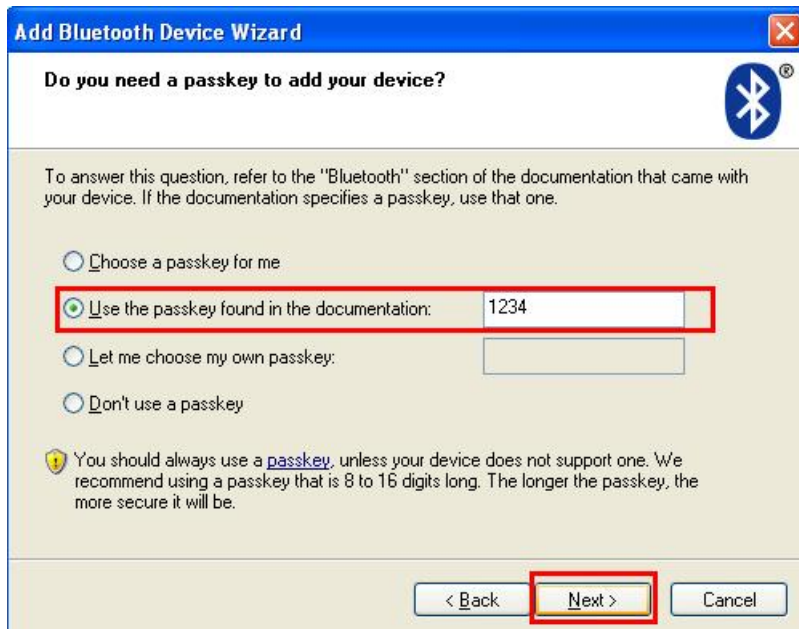
Add Bluetooth guide will search the Bluetooth device.



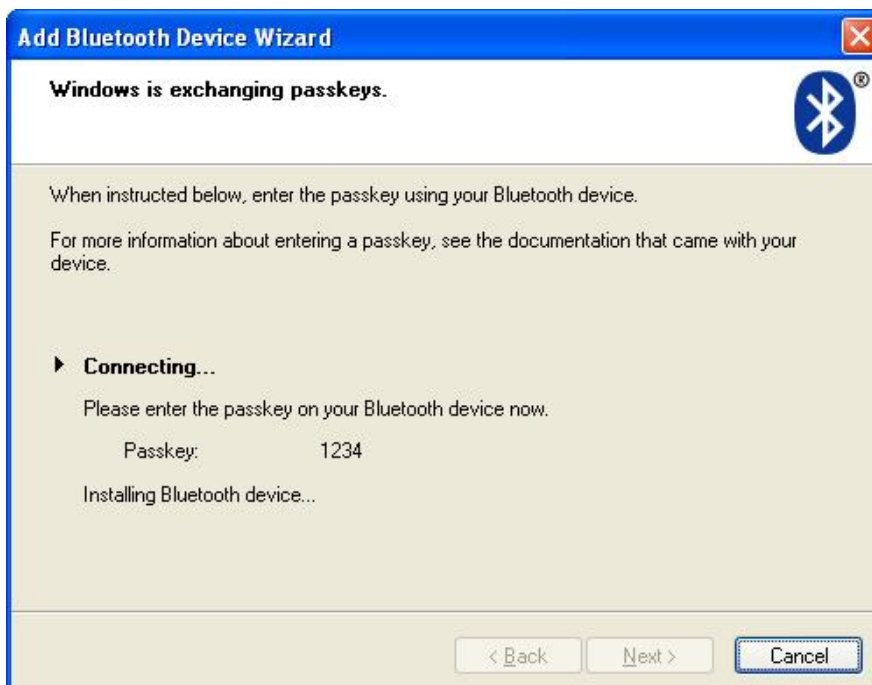
it will find PCUT CB-cutter, choose PCUT CB-cutter, click next step.



The Wizard will ask whether to use the password, please choose " Use the passkey found in the documentation", then input the Password in the textbox(The default passkey for CB series is 1234), then Click "Next"

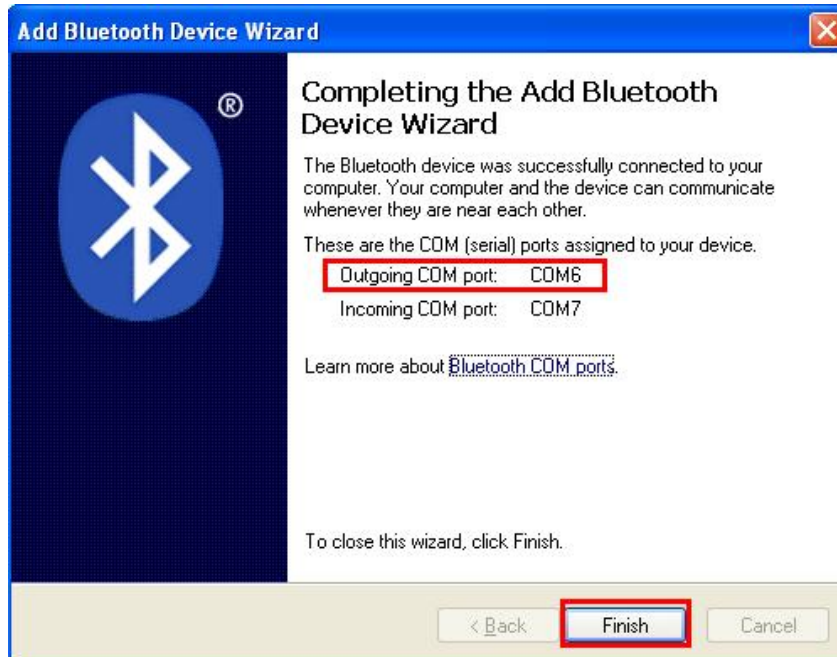


The Wizard will match and install the cutter's device:



When the computer finish adding the blue tooth, please take note of the out going COM port (eg. The comport is COM6); Click "Finish" to complete installation. (note: you should choose this com port in software when send file to cutter by blue tooth)











4.4.4. CB Cutter can cut via software by bluetooth after finishing adding Blue tooth device

#### 4.5 Advanced parameters settings

Advanced parameters settings include: Adjusting X-scale and Y-scale, exchange X and Y axis feeding, checking the version number of motherboard, finding out the mode of the plotter, setting mode of big letters cutting, setting the model of small letters cutting, self-ageing checking.

In the state of displaying ordinates, press "Pause/Continuance"  for three seconds, the cutters will go into Advanced parameters setting mode

in Advance setting, press  to go to the next setting, press  to go back to previous setting, press  and  to revise the current parameters; Press  to quit from Advance setting and go back to ordinates displaying status. (self-ageing checking is a exception)

Please see below examples and reletated information

First parameters setting : adjust X-scale,as shown below





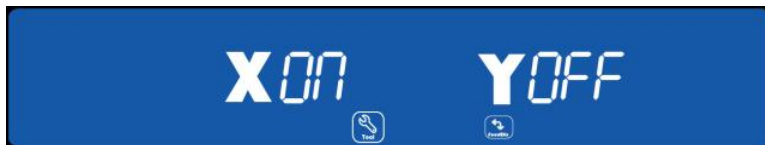
The higher the value of X-scale, the bigger image's X-scale output, otherwise smaller.

The second parameters setting : adjust Y-scale, as shown below



The higher the value of Y-scale, the bigger image's y-scale output, otherwise smaller.

The third parameters setting: exchange X and Y axis feeding, shown as below:



The X and Y axis will be exchanged via adjust this parameter, "On" hints the current feeding axis.

The fourth parameters setting : motherboard version, shown as bellow:



This parameters is read-only parameters, which is the version of the motherboard. The version number is important for after service.

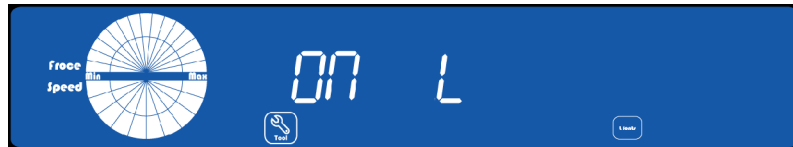
The fifth parameter setting : cutter's model, shown as bellow:



This parameters will be shown once switch the power of cutter. If this

parameter isn't match the real cutter, it will result in incorrect cutting proportion. If so, please feel free to contact with the seller or after service dept.

The sixth and seventh parameters setting: Mode of big letters cutting and small letters cutting, shown as below:



The above picture is to run big letters cutting mode(Enable: ON L, Disable: OFF L)




The above picture is to use small letters cutting mode(Enable: ON S, Disable: OFFS)

Only one mode can be enable at a time.

The eighth parameter setting: Self-ageing checking



Under this setting, press  button. The cutter will work automatically for self-aging checking, please restart the cutter if you want to stop it.

## 4.6 Offset

4.6.1. If the cutting is not closed , please increase the value of off-setting in the software you are using.

(please refer to the software manual for more details) Shown as bellow:



No off set, not close



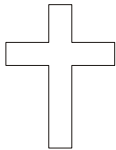
The value of off-setting is suitable

generally the value is set to be 0.5

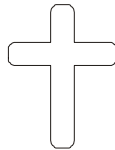
4.6.2 If the angel isn't cut correctly, please use Angle sharp compensation function in the software.

(The compensation value should be set according to current situation)

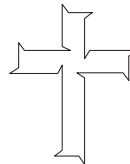
Shown as bellow:



Correct



Not enough



too much

(Please select high precision output when use the software.

angle compensation should between 0.1-0.7,usually set at 0.25

## 5. Specifications

Model	CB730	CB1300
Media Way	M bracket or Stand	Floor Stand
Mainboard	Cortex-M3 CPU , High-speed 32 bit processor	
Control Panel	Highlighted LCD with pattern,friendly operating keypad	
Driver	double high torsional force motor, micro-step driver	
Position	Limit edge system,origin can be set freely	
Max paper feed width	730mm	1300mm
Max cutting width	700mm	1270mm
Max cutting speed	600mm/s	
Max cutting length	20000mm	
Max cutting thickness	1.0mm	
Cutting force	0-600g(digital adjustment)	
Mechanical precision	0.05mm	
Repeatable precision	≤0.1mm/twice (On 1000*1000mm square)	
Type of balde	Carbide blade	
Type of Plot pen	All types diameter 11. 4mm plot pen	
Protocol	Compatible DM/PL, HP/GL	
Interface	Blue tooth/USB Port/Serial Port/D Card	
Power Supply	INPUT AC110V±10% 1.0A 60Hz, AC220V±10% 0.5A 50Hz	
Power Consumption	<100W	<120W
Operating environment	Temperature: +5 ± 35, Relative Humidity: 30% ~70%	
External size	1045*300*330mm	1595*300*415mm
Weight	16Kg	29Kg

## 6 Trouble shooting:

6.1 Question: Why it will be out of shape when cut letter smaller than 1cm?

Answer:

when cut small characters, please set the Angle sharp compensation in the software. angle compensation should between 0.1-0.7, usually set at 0.25

6.2 Question: Why there is an additional stroke after file finished.

Answer:

1. please check if blade can be moved up and down flexibly.
2. please replace the cutting software if there are some abnormal characters.
3. please check if the files are correct.

6.3 Question: why there is zigzag in the cutting.

Answer: PCUT motor has high speed and big power, so the cutting speed should be set according to the size of the character. Generally, set the lower speed for small precise characters ,higher speed for big characters in large quantity.

Size of the font (mm)	SPEED
<10	50-150
10-30	150-250-
30-50	250-350
50-500	350-500
>500	400-600

6.4 Question: why the material will deviate when cut larger format.

Answer:

put the M bracket parallel with the cutter, and pull out material from the roll to avoid giving resistance to cutting.

If cut large format, better use two pinch roller at both side of material.

If unever Friction of two pinch roller also will cause this problem, need change to new one.

6.5 question: why does cutter crash while cutting?

Answer:

- (1). If the input voltage is too low (150V), the plotter will restart.
- (2). If the input voltage is interfered, crash will happen too, please use regulated power source

6.6 Question: Why sometimes get an electric shock when touch the machine?

Answer:

Maybe the power supply are not grounded, make sure central line of the power source are grounded

6.7 Question: why the surface not smooth when cut sharp-angle?

Answer:

- (1). the blade Too long protruding from the holder, please adjust the length.
- (2). blade is abraded, replace the new one.

6.8 Question: why does the plotter cut a line firstly when cut for new file?

Answer:

if the last file not finished or not quit correctly, it will be remain in the cutter memory. please restart the cutter to solve the problem.

6.9 Question: No LCD display or a black squares displayed?

Answer:

- (1).if LCD no display, check whether the power supply work well.
- (2). If there is black square on the LCD, please check the power supply and voltage are normal,if still the problem, please contact service center.

6.10 Question: why some of the cutting can not close?

Answer:

because the blade with angle. so will cause not closing.  
You need set "closing compensation" in the software.  
generally the value is set to be 0.5

6.11 Question: why cutting depth dose not equal, some deep, some light?

Answer:

the blade cushion is to protect the blade, After long period using, there will be a scratch on the cushion, which make the cushion not smooth, please change to new one.

if the abrasion of the cushion is not serious, increase the blade pressure can solve the problem for a while.

6.12 Question: why the cutter not start work?

Answer:

- (1). If you use serial port

Check whether the plotter is properly connected with computer. PCUT usually use COM1 or COM2 default serial port out put from computer, please select com1 or com2 in the software when out put.

set the baud rate at 38.4k ,or 38400 both in software.

(2). If you use USB port

Check if the USB driver program of the plotter is for PCUT CB series

if you success install the USB driver

you can see a new "usb serial port(com8)" list under the "port(com and LPT)" in device manager,com8 for example, select com8 and set baud rate at 38.4k ,or 38400 in software when out put.

6.13 Question: why can not take off the vinyl after cutting?

Answer:

(1). Adjust the cutting force to be suitable value.

(2). Check whether the knife has been used for too long, if the knife top is not sharp or broken. please change to a new blade and try,the cut line is very thin and clear for new blade, while it is rough for used blade.

6.14 Question: what should pay attention to when cutting big characters?

Answer:

(1). When cutting big characters on small format cutter, software can divide the file into several pages. You can combine them together, make sure the out put size is the same with the vinyl material. you can also add frame on the page or set the distance for joint.

(2). When cut the big characters on large format cutter, you should fist feed the material and press up or down button, watch deviate degree, according this, you can decide to divide the file into how many sections, this can avoid wasting the material.

6.17 Question: how to maintain the plotter?

Answer:

PCUT CB series plotter use advanced oil bearing from Japan, no need add oil even it works for a long time. need clean the dust with soft brush .if its precision degrade after long use,please do some maintenance for running parts (for example,firning or replacing the abraded parts).

6.18 Question: Why does the plotter out of control sometimes?

Answer: maybe while transporting or using it, may cause the signal line is not

connected well, open the machine and reconnect all related lines. If still has the problem please contact local agent or maintenance center.

6.19 Question: Why does the plotter shut down suddenly?

Answer: because of vibration for a long period, or affected by temperature, may cause potential drift happen to driving board , please contact local agent

Or maintenance center.