



Jaguar II Series User Manual



<http://www.GCCworld.com>

NOTICE

GCC reserves the right to modify the information contained in this user manual at any time without prior notice; un-authorized modification, copying distribution or display is prohibited. All comments, queries or suggestions concerning this manual please consult with your local dealer.

Table of Contents

Important Information

1. General Information

1.1	Introduction	1-1
1.2	Package Items	1-1
1.3	Product Features	1-2
1.4	The Front View of Jaguar II	1-3
1.5	The Back View of Jaguar II	1-3
1.6	The Whole View of Jaguar II	1-4
1.7	The Left-hand Side of Jaguar II	1-5
1.8	The Right-hand Side of Jaguar II	1-5

2. Installation

2.1	Precaution	2-1
2.2	Stand & Flexible Media Support System	2-2
2.3	Desktop Flexible Media Support System	2-8
2.4	Instruction of Damper Roller	2-10
2.5	Blade Installation	2-11
2.6	Automatic Blade Length Detection	2-13
2.7	Media Loading	2-15
2.7.1	Loading the Sheet Media	2-15
2.7.2	Loading the Roll Media	2-17
2.8	Tracking Performance	2-20
2.9	Cutting Force and Offset Adjustment	2-21
2.10	How to Cut 3mm Letter	2-22
2.11	How to Make A Long Plot	2-22
2.12	When Completing the Cutting Job	2-23

3. The Control Panel

3.1	The LCD Panel	3-1
3.2	Menu in On-line Mode	3-2
3.3	Menu in Off-line Mode	3-3
3.4	Menu Items	3-5

4. Connection

4.1	USB Interface	4-1
4.2	Driver Un-installation	4-5
4.3	RS-232 Interface	4-8
4.4	Data Transmitting	4-8
4.5	Printer Sever Shared setting	4-8
4.6	Jaguar II Print Driver setting	4-11
4.6.1	Option Page	4-11
4.7	Reference Parameter Setting for different materials	4-14

5. Maintenance

5.1	Cleaning the Cutting Plotter	5-1
5.2	Cleaning the Grid Drum	5-2
5.3	Cleaning the Pinch Rollers	5-2

6. Trouble Shooting

6.1	Non-Operational Problems	6-1
6.2	Operational Problems	6-2
6.3	Communication Problems	6-3
6.4	Software Problems	6-4
6.5	Cutting Quality Problem	6-5

Appendix

A-1	Jaguar II Specification	A-1
A-2	Blade Specification	A-2
A-3	DirectCut	A-3

Important Information

Thank you for purchasing the **GCC Jaguar II Cutting Plotter**.

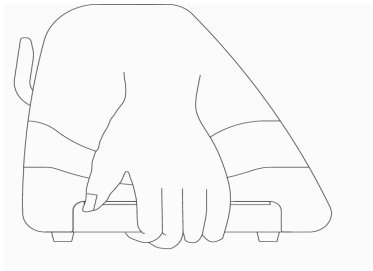
Before you use the cutting plotter, please make sure that you have read the safety precautions and instructions below.



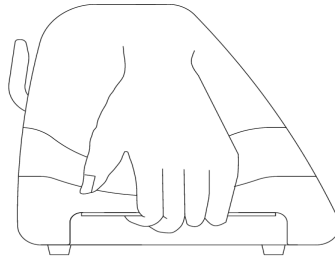
Caution

SAFETY PRECAUTIONS!

- For safety concern, please always hold the cutter firmly **from the bottom** while moving it. Do not move the cutter by clasping the depression area on both sides.



O (Correct)

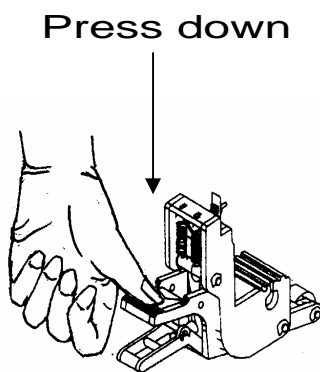
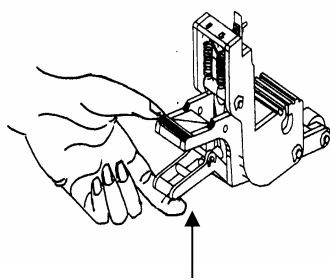
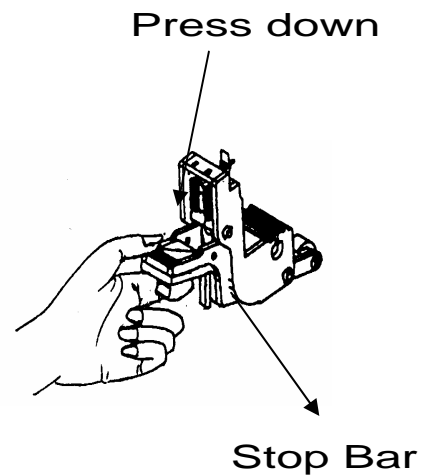


X (Incorrect)

- Do not shake or drop the blade holder, a blade tip can fly out.
- During an operation, do not touch any of the moving parts of this machine (such as the carriage). Also be careful to make sure that clothing and hair do not get caught.
- Always connect the power cable to a grounded outlet.
- Always use the accessory power cable which is provided. Do not wire the power cable so that it becomes bent or caught between objects.
- Do not connect the power cable to branching outlet to which other machines are also connected, or use an extension cable. There is danger of overheating and of mis-operation of the machine.
- Keep the tools away from children where they can reach.
- Always put the pinch rollers within the white marks.

Warning

Never press the top release grip and pull the bottom release grip at the same time as the pictures shown below:

O (CORRECT)**DISABLE****X (INCORRECT)**

Pull up bottom to release grip

ENABLE**Note:**

In case the grips clipped together due to your wrong operation, please use a tweezers to pull out the stop bar when pressing down the top release grip. Keep the stop bar outside then release the grips as the right figure.

1. General Information

1.1 Introduction

Jaguar II series cutting plotters have been designed to produce computer-generated images or perform contour cutting on sheets or rolls of vinyl media.

This manual covers the following models of Jaguar II series cutting plotters:

·JII-61	for media width: 50mm(1.97") ~ 770mm(30.3")
·JII-101S	for media width: 50mm(4.7") ~ 1270mm(50")
·JII-132S	for media width: 50mm(4.7") ~ 1594mm(62.7")

1.2 Package Items

The package of the Jaguar II model contains the items listed below, please check carefully.

If you find any item missing, please consult your local dealer for further assistance.

Standard Item	Quantity
1. Cutting Plotter	1
2. Stand Set (for JII-101S/132S only)(Optional for JII-61) <ul style="list-style-type: none">● 2 piece of T-shape stand● 1 piece of stand beam● 18 pieces of M6 screws● 1 piece of M5 L-shape hexagon screw driver● 1 piece of Installation Guide for Stand Set	1

1.4 The Front View of Jaguar II(Figure 1-1)

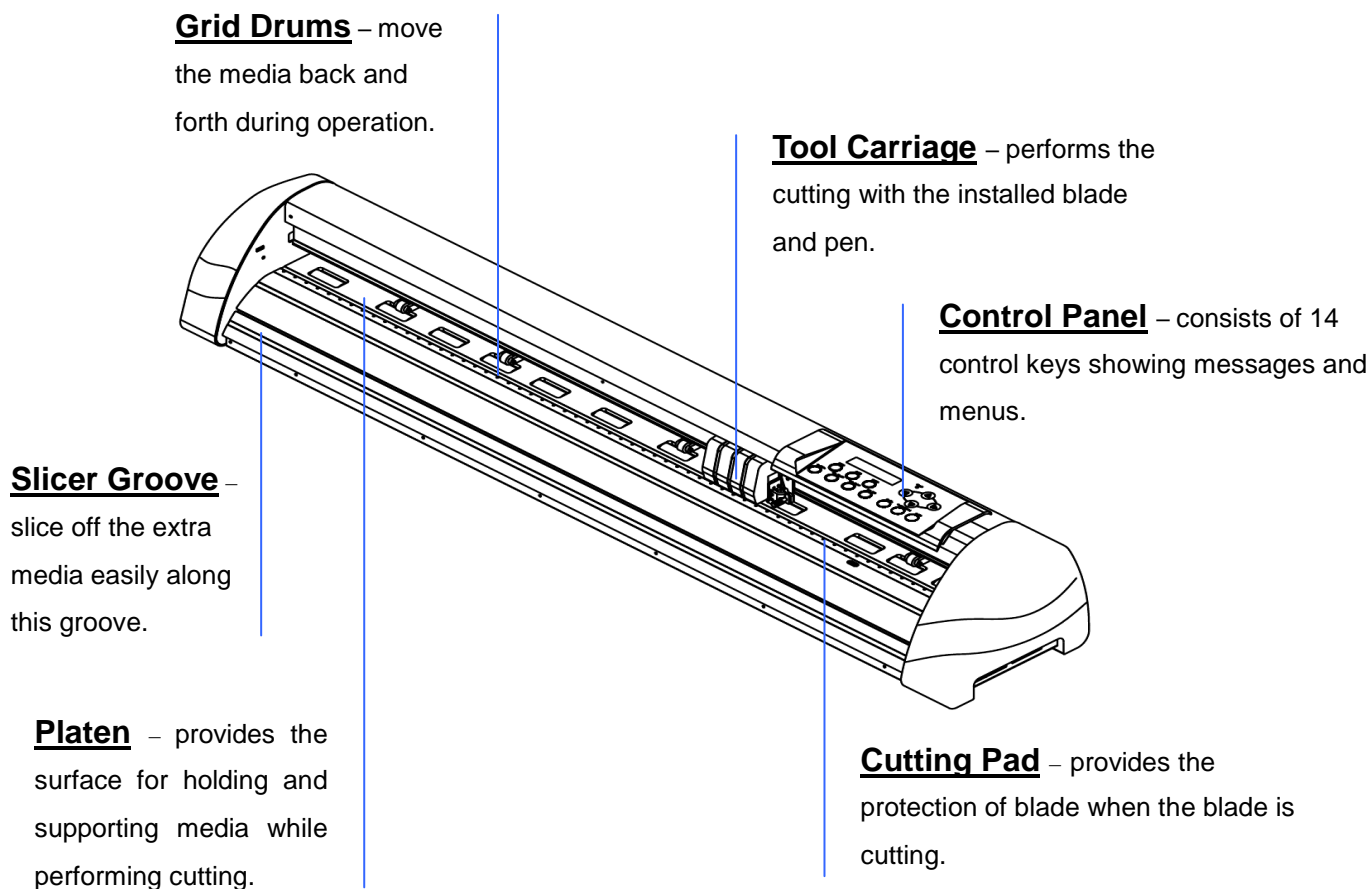


Figure 1-1

1.5 The Back View of Jaguar II (Figure 1-2)

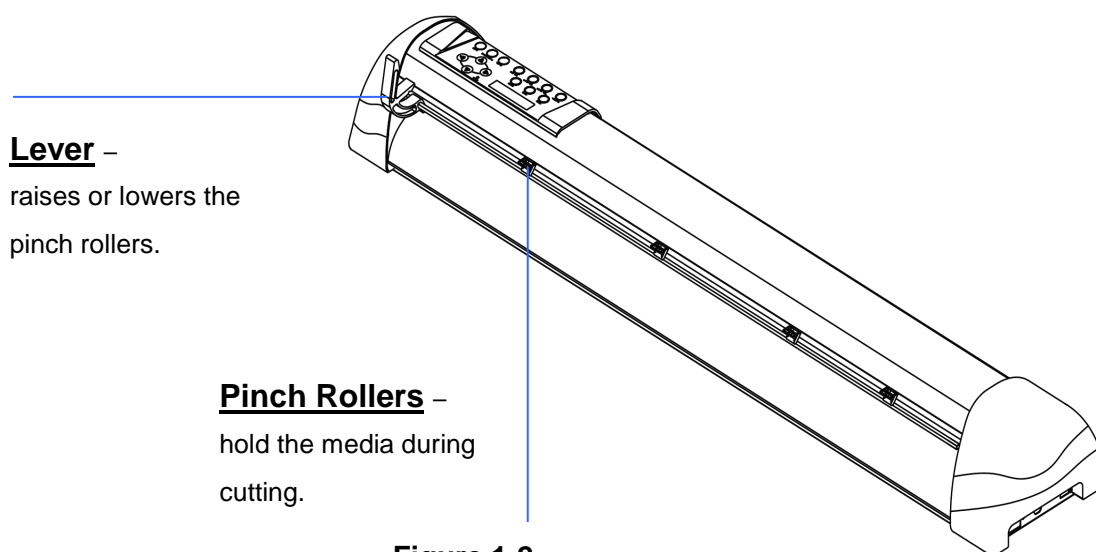
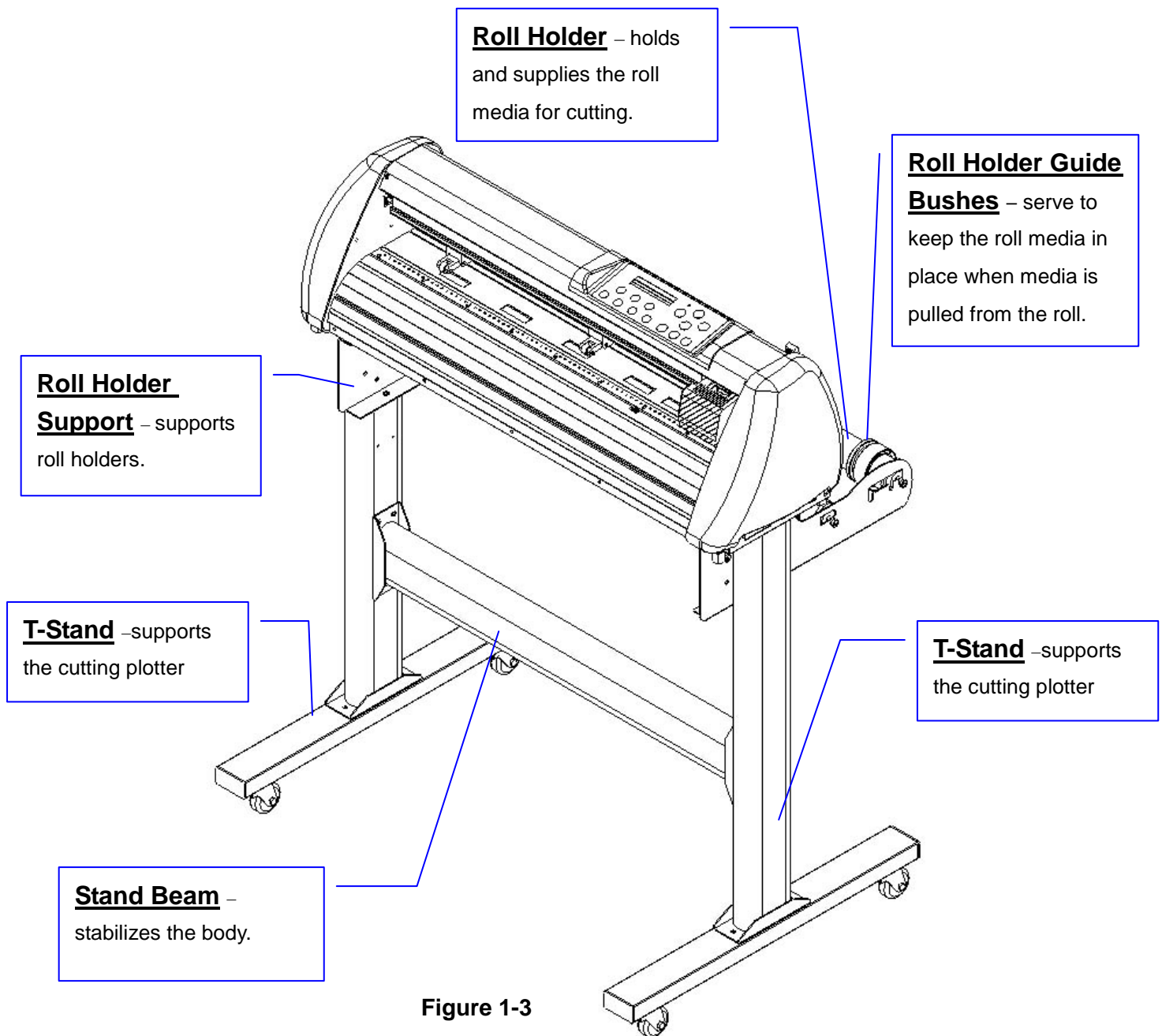
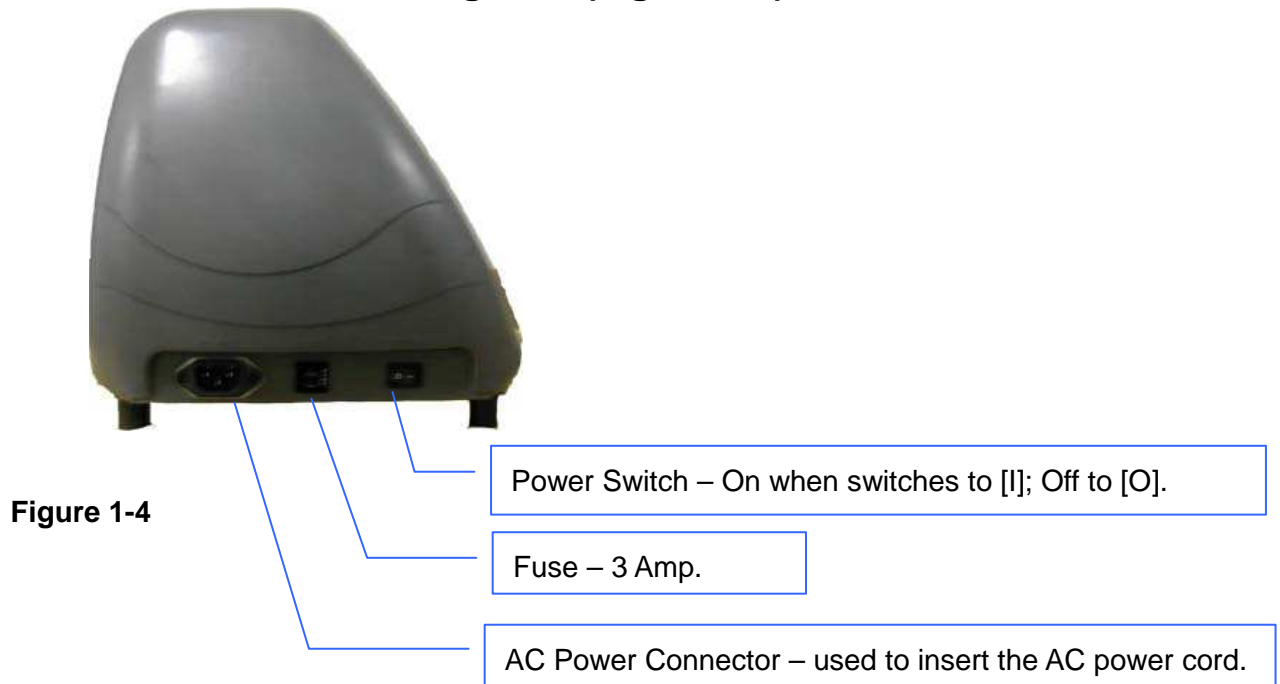


Figure 1-2

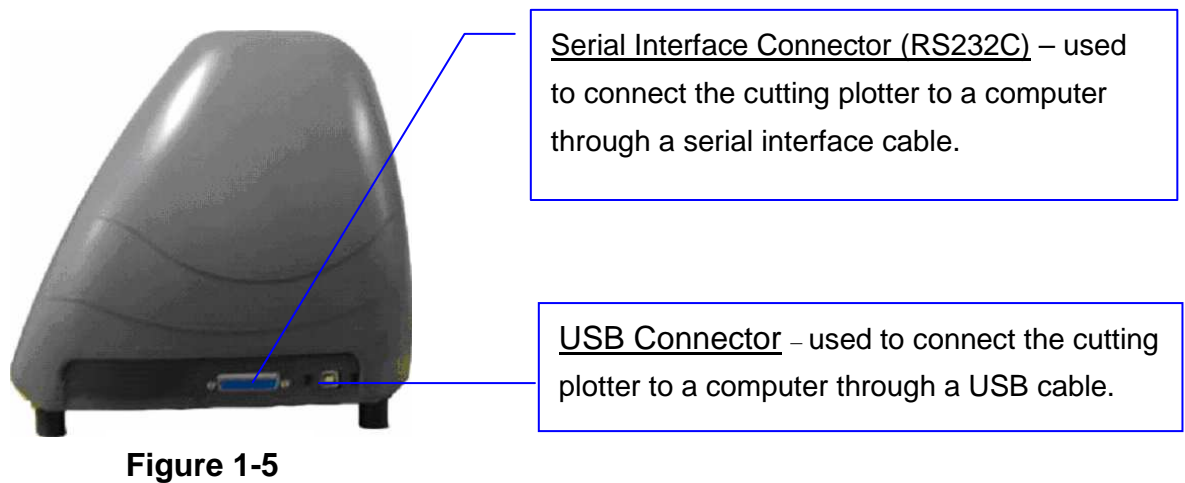
1.6 The Whole View of Jaguar II (Figure 1-3)



1.7 The Left-hand Side of Jaguar II (Figure 1-4)



1.8 The Right-hand Side of Jaguar II (Figure 1-5)



2. Installation

2.1 Precaution

Please read below information carefully before you start installation.

Notice 1

- Make sure the power switch is off before installing the cutting plotter.
- Carefully handle the cutter to prevent any injuries.

Notice 2 Choosing a proper place before setting up the cutting plotter

Before installing your cutting plotter, select a suitable location, which meets the following conditions.

- The machine can be approached easily from any direction.
- Keep enough space for the machine, accessories and supplies.
- Keep the working area stable, avoiding sever vibration.
- Keep the temperature between **15 and 30 °C (60-86°F)** in the workshop.
- Keep the relative humidity between **25% and 75%** in the workshop.
- Protecting the machine from dust and strong air current.
- Preventing the machine from direct sunlight or extremely bright lighting.

Notice 3 Connecting the Power Supply

Check the plug of the power cord to see if it matches with the wall outlet. If not, please contact your dealer.

- Insert the plug (male) into a grounded power outlet.
- Insert the other end (female) of power cord into the AC connector of cutting plotter.

2.2 Stand & Flexible Media Support System (JII-101S/132S)

Step 1

Please examine supplied items in the accessory box of stand carton:

- 2 pieces of base beams
- 2 pieces of side beams
- 1 piece of stand beam
- 20 pieces of M6 screws
- 1 piece of M5 L-shape hexagon screw driver
- 1 piece of Installation Guide for Stand Set

Step 2

- Remove the plotter body and the accessories from the shipped carton.
- Assemble the base beam to the side beam with 2 screws to form a T-shape stand.
(See Figure 2-1)

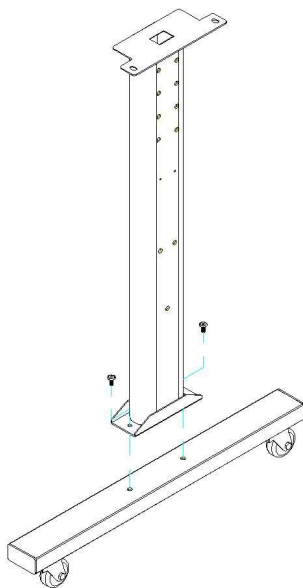
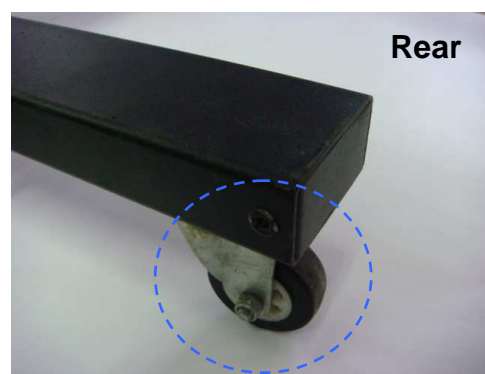
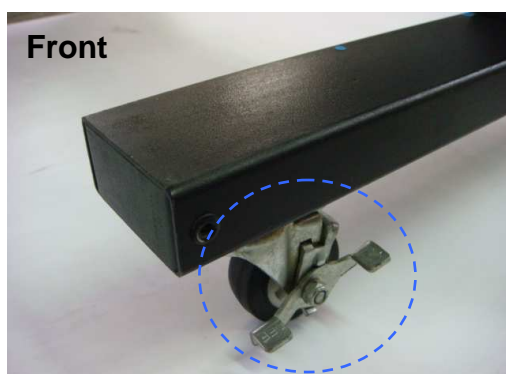


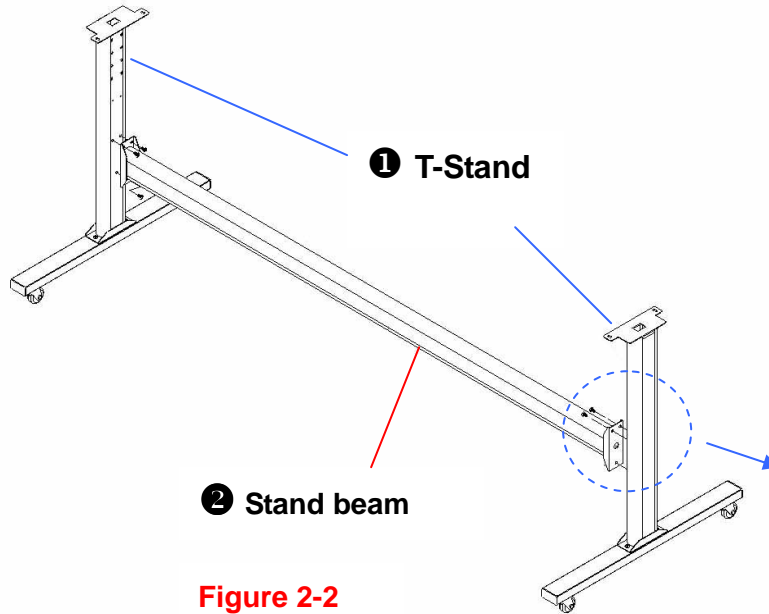
Figure 2-1

Please pay attention to the direction of the base beam (the wheel on the front end of the beam comes with a break while the rear one is on its own).



Step 3

Place the stand beam upright on the T-stand and follow number ① ② to assemble.
(See Figure 2-2 & 2-3)

**Step 4**

Position the stand beam perpendicularly to part ① and put the screws into the holes and tighten them as Figure 2-3. Then the complete picture of stand will be like Figure 2-2.

Step 5

Remove the cutting plotter from the carton. Position your stand under the plotter, and then insert the screws into the holes on plotter's bottom and tighten them up as shown in Figure 2-4.

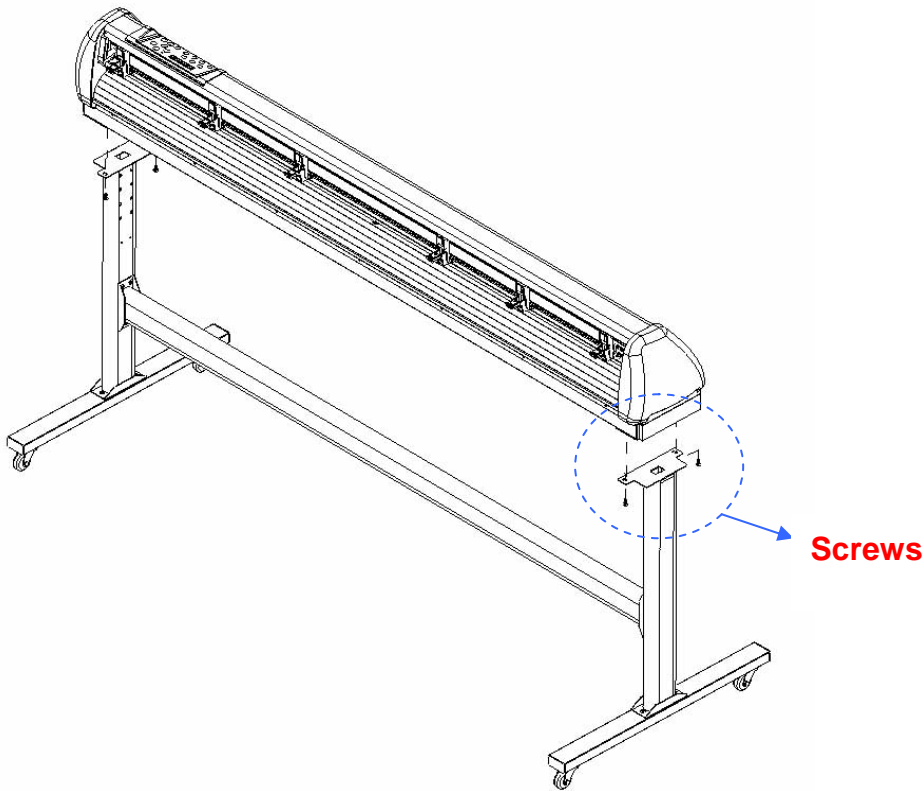
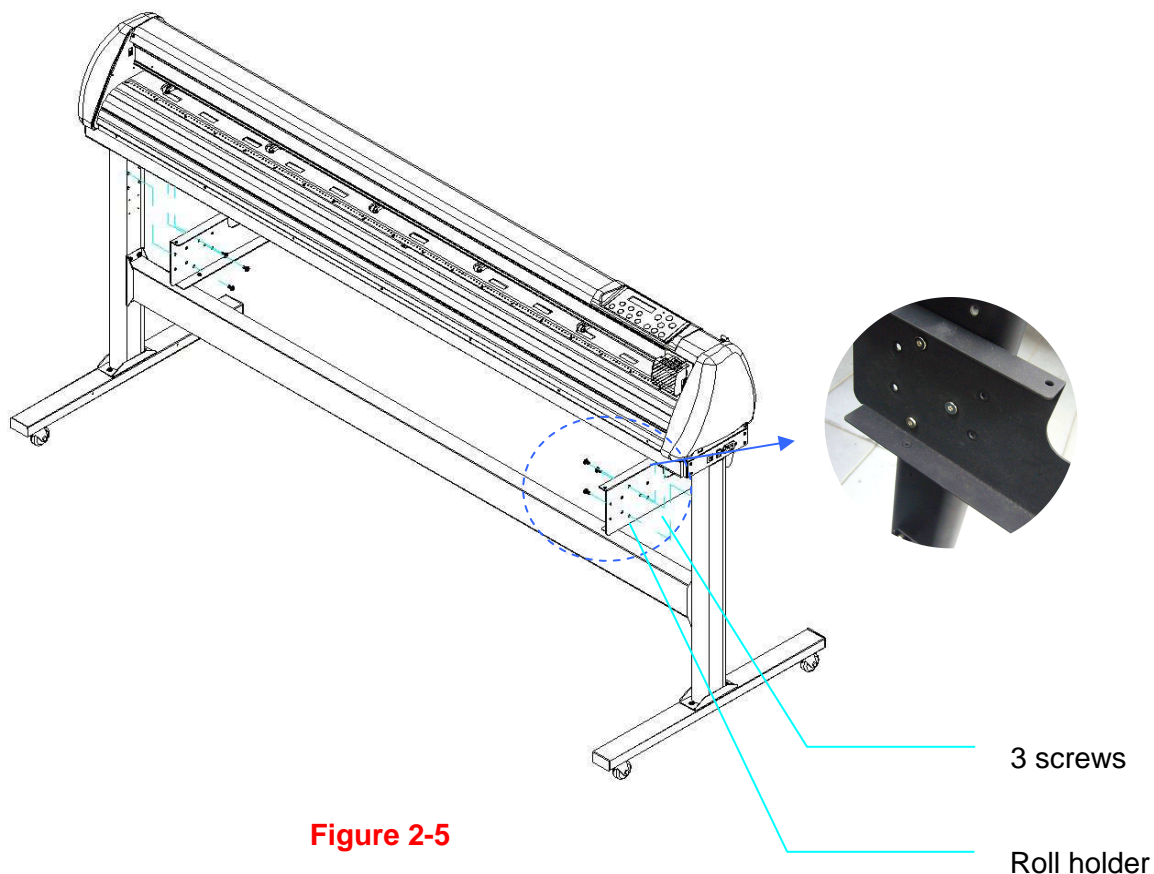


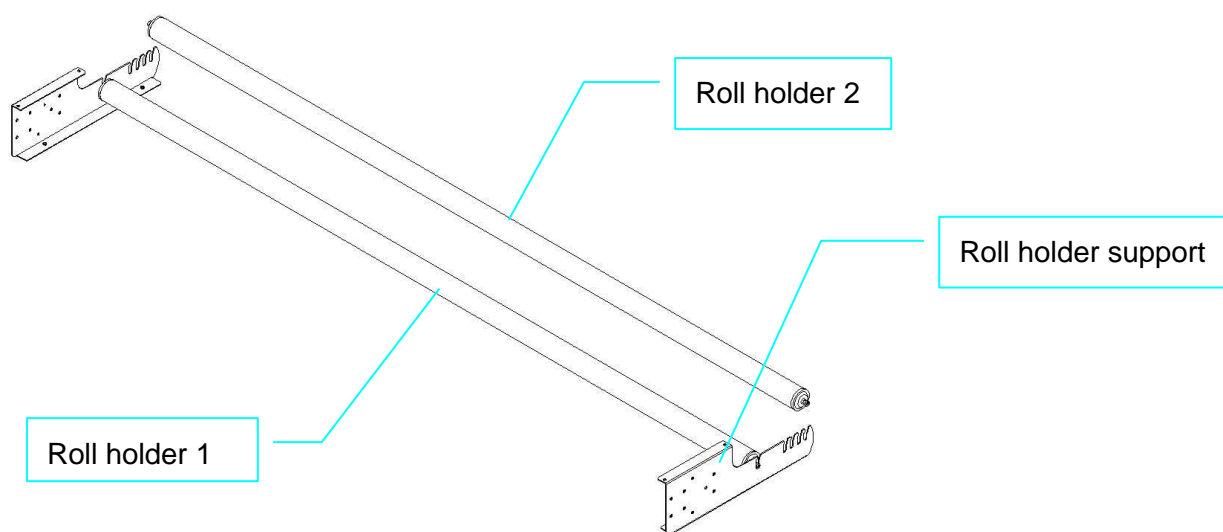
Figure 2-4

Step 6

Insert the roll holder support with the screws into the holes of the stand, and then tighten them up as shown in Figure 2-5. You could decide roll holder support's position by inserting into different holes.

**Step 7**

Place the roll holder 1 onto the roll holder support (Figure 2-6).



Step 8

Turn the screw counter-clockwise for around three times after unpacking roll holder 2.

**Step 9**

Insert the end of the roll holder without the damper into the left roll holder support and then insert the end of the roll holder with the damper into the right roll holder support. Ensure the white protrusion is wedged in the groove.



Step 10

Tighten the screw on the damper until it is securely attached to the right roll holder support.

**Step 11**

Lastly, the complete picture will be shown like below. (Figure 2-7).

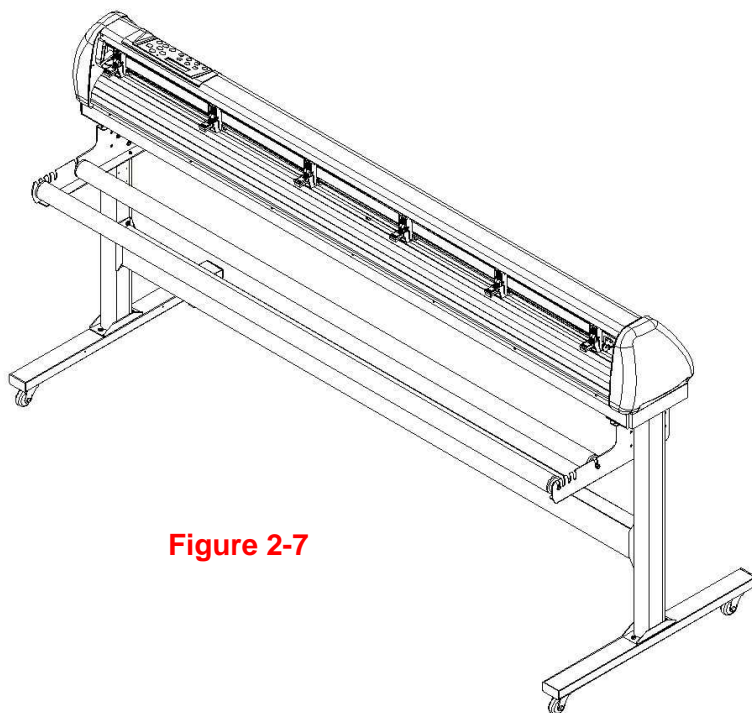


Figure 2-7

2.3 Desktop Flexible Media Support System (For J4-61 only)

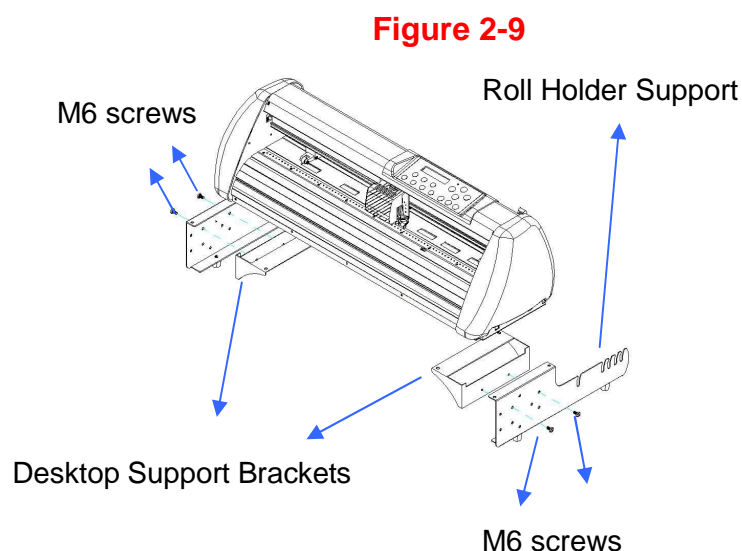
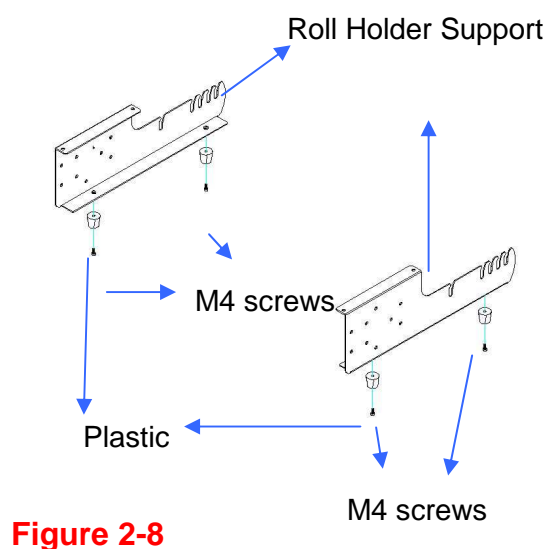
Step 1

Please examine the following items in stand carton's accessory box:

- 1 set of Roll Media Flange (2 pieces)
- 1 set of Roll Holder (2 pieces)
- 1 set of Roll Holder Guide Bushes (4 pieces)
- 1 set of Roll Holder Support (2 pieces)
- 1 set of Desktop Support Bracket (2 pieces)
- 4 pieces of Plastic Foot
- 4 pieces of M4 screws
- 12 pieces of M6 screws
- 1 piece of M4 L-shape hexagon screw driver
- 1 piece of M5 L-shape hexagon screw driver
- 1 piece of M6 L-shape hexagon screw driver (for adjusting the screws of Roll Holders)
- 1 piece of Installation Guide for Roll Holder

Step 2

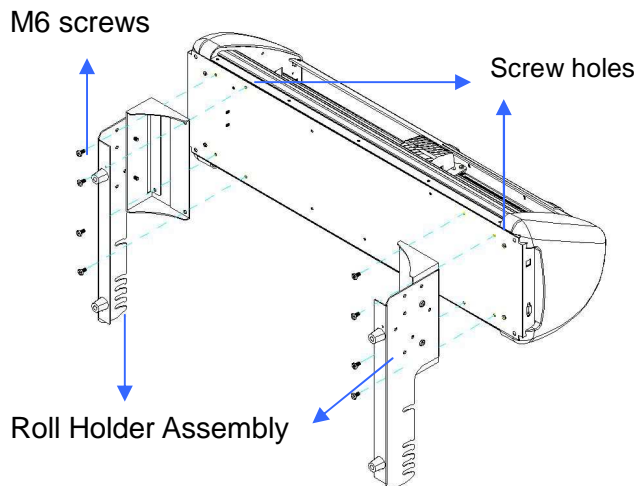
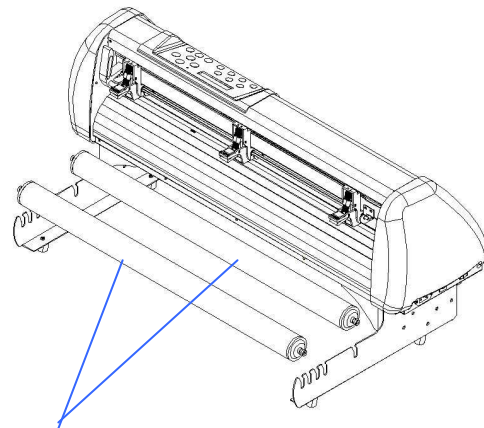
Put the 4 Plastic Foot under the Roll Holder Support and insert the M4 screw into the hole of Plastic Foot and tighten them with the M4 L-shape screw driver. (Figure 2-8)



Step 3 Position the Desktop Support Brackets beside the Roll Holder Support and insert M6 screws into the Roll Holder Support and tighten them with M6 L-shape screw driver. (Refer to Figure 2-9).

Step 4

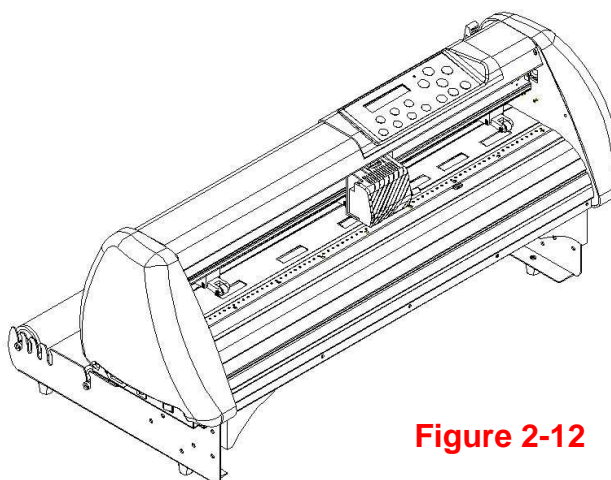
Put the bottom of machine in lateral, and position the Roll Holder Assembly beside the bottom of the machine. Then, insert the M6 screws into the holes of Roll Holder support assembly and tighten them with M6 L-shape screwdriver. Like Figure 2-10.

**Figure 2-10****Figure 2-11****Step 5**

Place the two roll holders into the holes of Roll Holder Support (Figure 2-11). To install the roll holder with damper, please refer to chapter 2.2, step 8 to step 10.

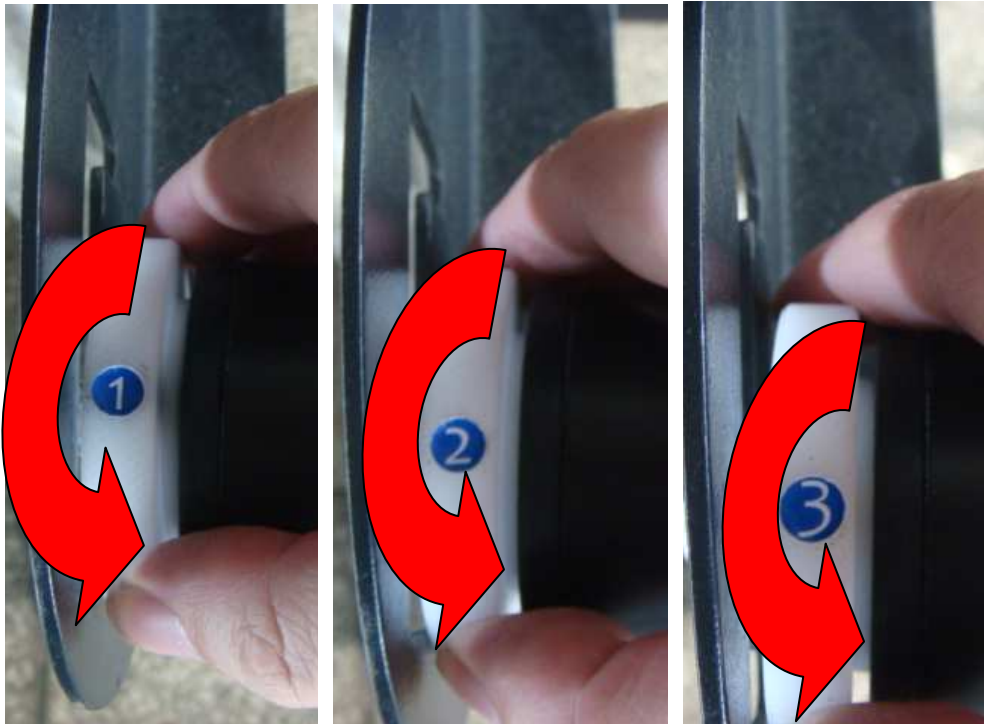
Step 6

The complete Desktop Media Support System will be shown as in Figure 2-12

**Figure 2-12**

2.4 Instruction of Damper Roller

Turn the wheel as instructed below to adjust damping. The bigger the number is, the stronger the damping. The volume symbol sticker indicates the damping level.



2.5 Blade Installation

Figure 2-12 is the illustration of the blade holder. Insert a blade into the bottom of the blade holder and remove the blade by pushing the pin. Make sure that your fingers are away from the blade tip.

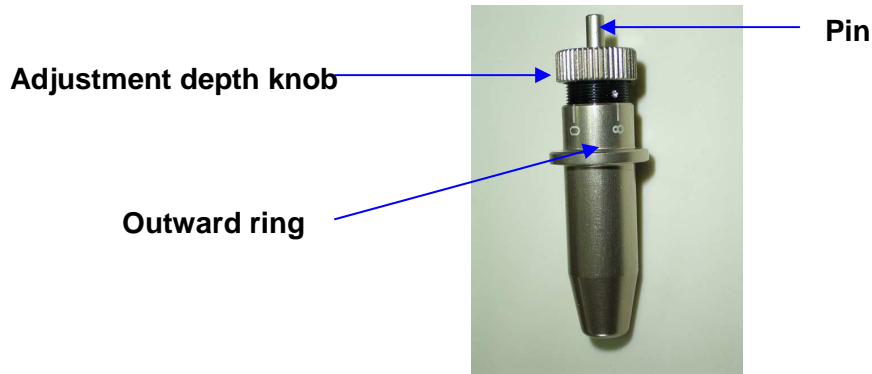


Figure 2-12

Step 1

Install blade (Figure 2-13).

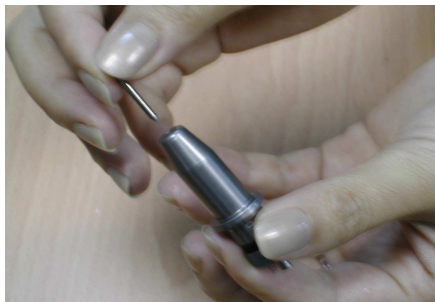


Figure 2-13



Figure 2-14

Step 2

Push the blade to the bottom of the blade holder. (Figure 2-14).

Step 3

Adjust the blade tip to suitable length by screwing "Blade tip adjustment screw" clockwise or count-clockwise.



Tips:

"The proper length" means the blade's length is adjusted 0.1mm more than film's thickness and it can completely cut through the film layer yet avoid penetrating the backing.

Step 4

Insert the blade holder into tool carriage. Please note the outward ring of the holder must put into the grooves of carriage firmly (see Figure 2-16), then fasten the case (Figure 2-17).



Figure 2-16

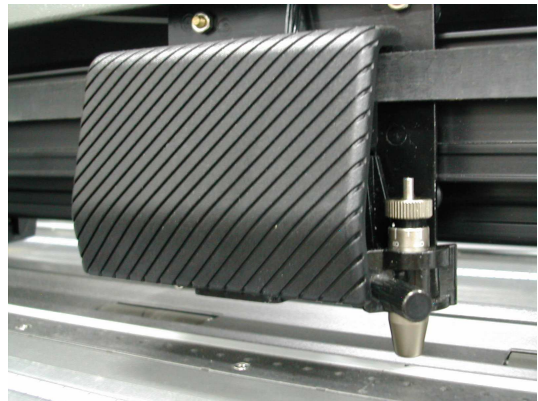


Figure 2-17

Step 5 Use the reversing steps to remove the blade holder.

Caution

The blade will lose its sharpness after a period of usage, the cutting quality might be affected. By increasing the cutting force, it might do the trick. However, once the blade is worn out and no longer provides a reliable cutting, you should replace a new one. The blade is consumable and must be replaced as often as necessary to maintain the cutting quality. The quality of the blade deeply affects cutting quality. So be sure to use a high quality blade to ensure good cutting results.

2.6 Automatic Blade Length Detection

Figure 2.-18 is the new blade holder with a scale and the carriage with a mark. This blade holder detects blade length automatically and shows how the knob needs to be turned on the LCM.

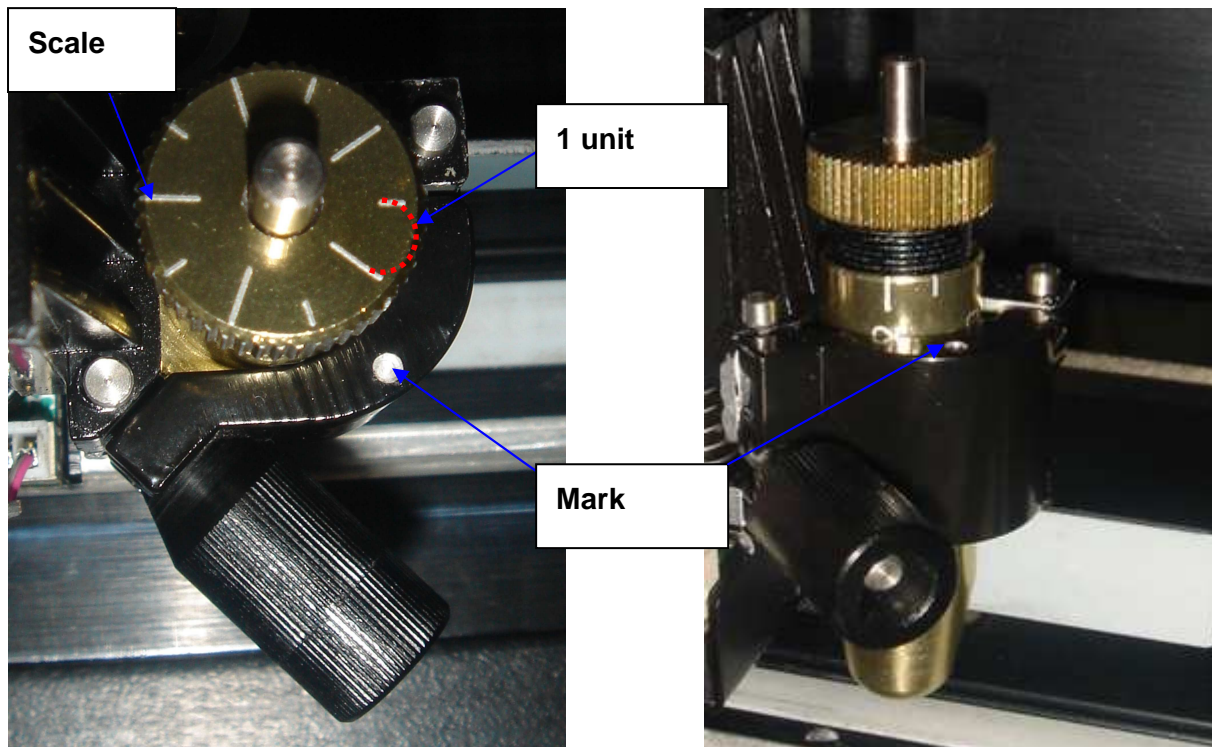


Figure 2-18

Figure 2-19

There are 10 units on the scale; each unit equals to 0.05 mm, allowing you to adjust the blade length for 0.00mm-5.00mm (Figure 2-18).

Follow the steps below to adjust the length of the blade:

1. Keep the blade tip within the blade holder before you start adjusting.
2. Align one of the scales on the blade holder to the mark on the carriage
3. Select "Blade Length Adjust" under "CUT TEST" on the LCM, enter the blade length wished in "Set Length"; test the blade holder first and then test the blade length by pressing ENTER.

Note: Keep the blade holder at the same position when you perform blade holder and blade length tests.

4. When blade holder and blade length tests are finished, the screen will show you to what degree (the unit of the value following "CW" or "CCW" is "circle") and in which direction [CW (clockwise) or CCW (counterclockwise)] you should turn the adjustment knob.

EG, Turn CW 5 is telling you that you should turn the knob for 5 units clock-wisely (Figure 2-20, Figure 2-21).

5. The screen will show "Adjustment completes" when the value on the screen is 0, the blade length is perfect and no more adjustment needs to be made. Press "Enter" now to complete the process and you may start cutting at this point.

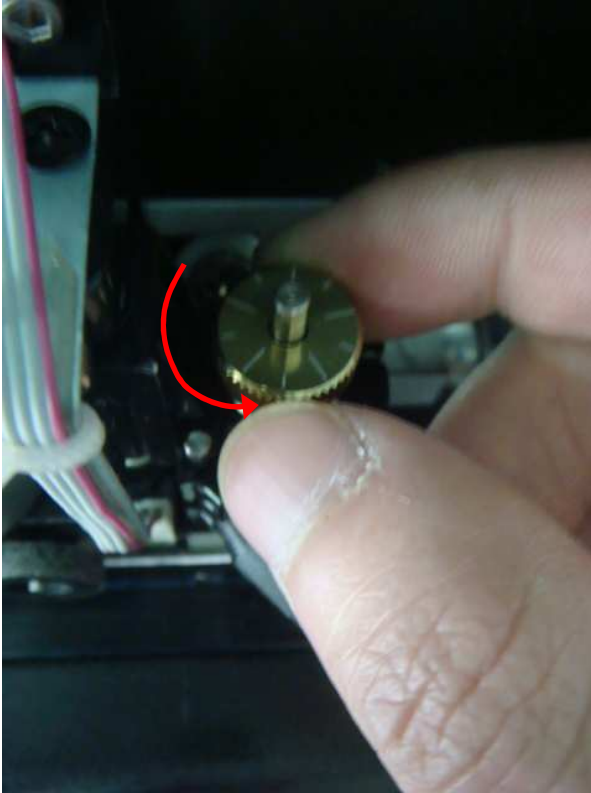


Figure 2-20

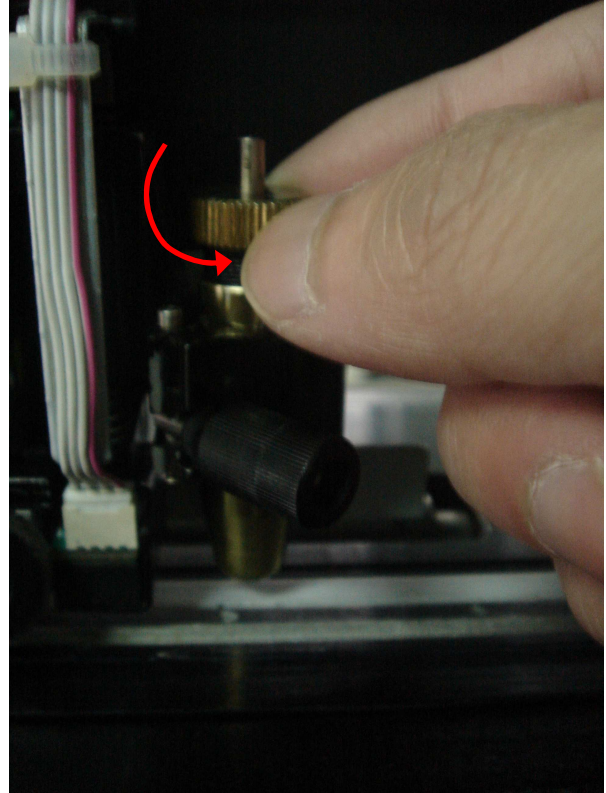


Figure 2-21

2.7 Media Loading

2.7.1 Loading the Sheet Media

To load the media properly, please follow the procedures listed below:

Step 1

Use the lever on the upper right side of the cutting plotter to raise or lower down pinch rollers. Pull the lever forward until it makes a clicking sound then the pinch rollers are raised (Figure 2-22).

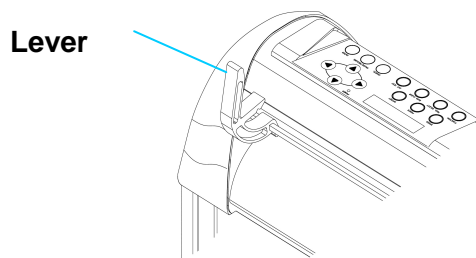


Figure 2-22

Step 2

Load your media on the platen and slide it under the pinch rollers from either the front side or the backside. The **alignment rulers** on the platen extension will help you to adjust the media precisely.

Note:

Be sure that the media must cover the paper sensors on the platen when loading the media. At least one of the two paper sensors (Figure 2-23) should be covered. Once the media covers the sensor, the cutting plotter will size the media width and length automatically.

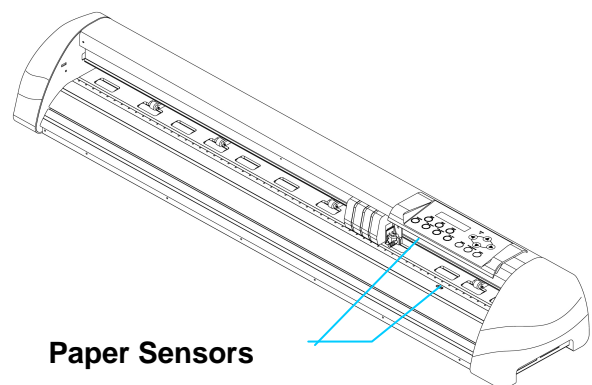


Figure 2-23

Step 3

Then move the pinch rollers manually to the proper position. Be sure the pinch rollers must be positioned above the grid drum. The **white marks** on the top trail will remind you where the grid drums are (Figure 2-24).

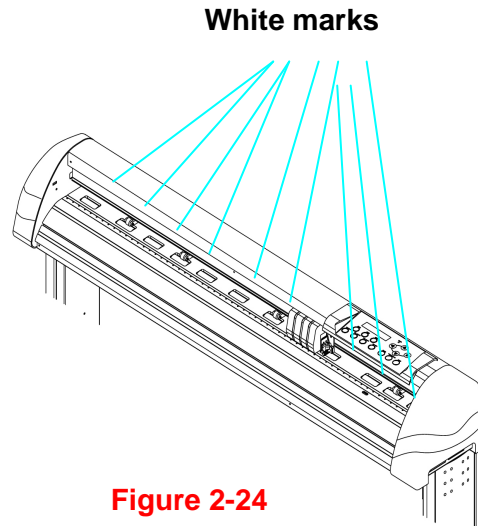


Figure 2-24

Step 4

Push the lever backward to lower down the pinch rollers.

Step 5

Turn on the power; the tool carriage will measure the size of the media automatically. And the plotting cutter begins to work.

Note:

1. Always adjust the position with the pinch roller raised.
2. Move the pinch roller by applying force at the rear portion of the pinch roller support.
3. Do not move it by holding its front rubber roller (Figure 2-25).

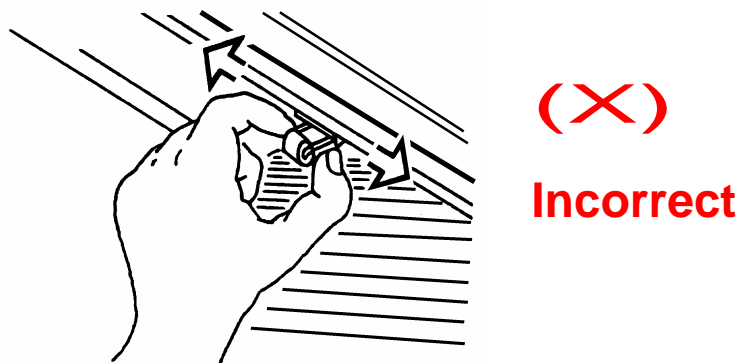
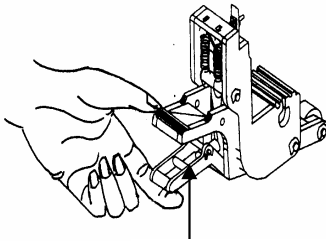


Figure 2-25

Note:

Please pull up the bottom of all pinch rollers (Figure 4-5) before the lever is pushed backwards to ensure accurate media width detection.



Pull up bottom to release grip

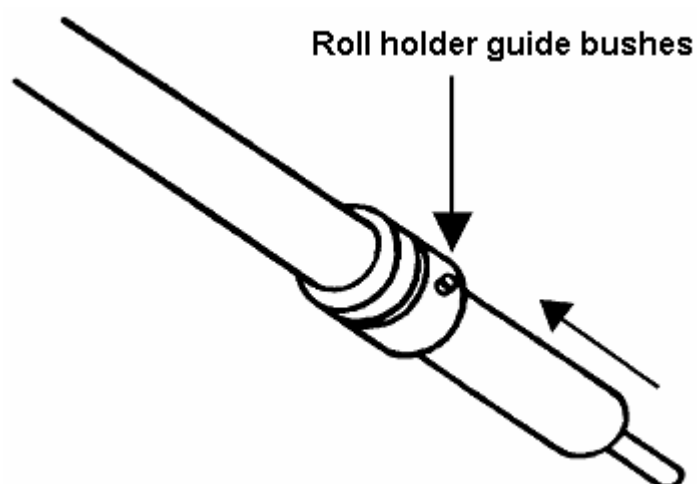
ENABLE

Figure 2-26

2.7.2 Loading the Roll Media

Step 1

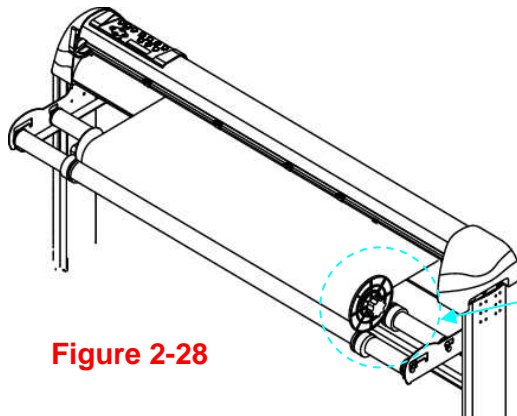
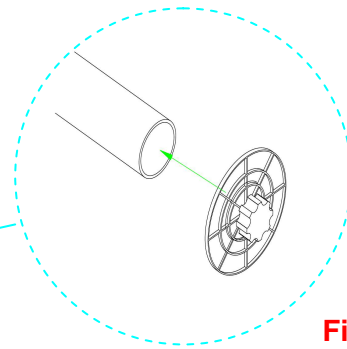
Put the roll holder guide bushes on two roll holders (Figure 2-27).



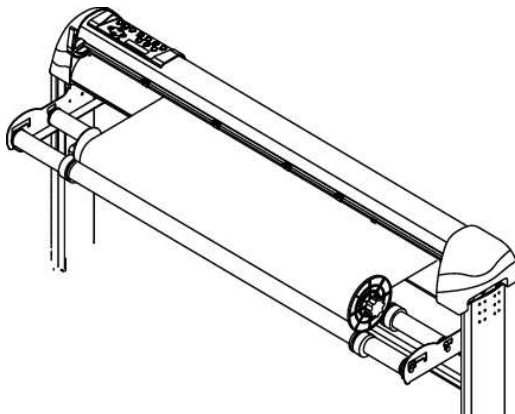
-- Option A (Use the media flanges) (Recommended)

Insert a roll media flange at the end of each roll media and tighten the thumbscrew until the roll media is firmly gripped (see Figure 2-28).

Then put the roll media on the roll holders. Adjust the position of the roll media ensure that media flanges are able to run in the grooves of roll holder guide bushes (Figure 2-29)

**Figure 2-28****Figure 2-29****-- Option B**

Insert the two roll holders into the roll media support set then place the roll media directly between the two roll holders (Figure 2-30).

**Figure 2-30**

Step 3

Load the media on the platen. Please refer to “2.6.1 Loading the sheet media”. After loading the roll media, flatten the media on the platen and hold the front edge of the roll media firmly (Figure 2-31).

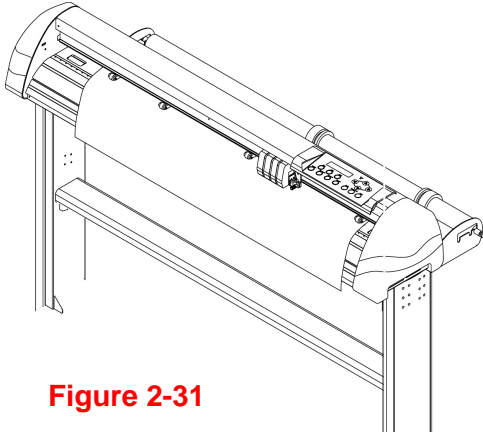


Figure 2-31

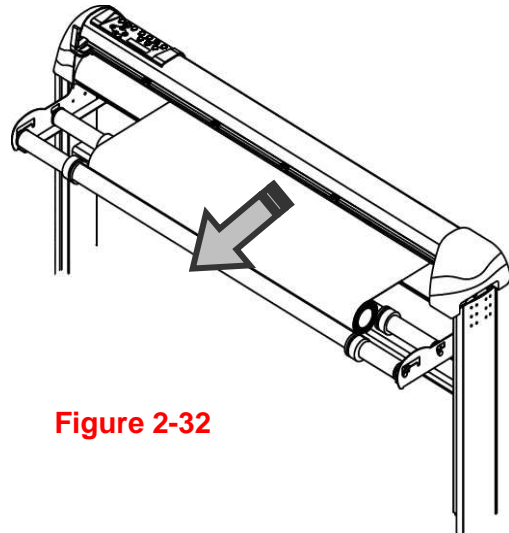


Figure 2-32

Step 4

Turn the roll downward to make an equal tension across the media (Figure 2-32)

Step 5

Move the pinch rollers to the appraise location and note that the pinch rollers must be positioned above the grid drums.

Step 6

Push the lever backward to lower down the pinch rollers.

Step 7

Fix roll holder guide bushes on the roll holder to secure the roll media.

Step 8

Turn on the power switch and select Roll, Edge or Single mode appropriate for one time setup, or set to Default Roll in Sizing Setting and Roll type sizing will be performed when the machine is turned on.

Then the cutting plotter is ready to work.

Step 9

Use the reverse steps to remove the media.

Note :

Make sure that the media tension is equally distributed from left to right. If the media were not tightened enough against the platen, it would cause tracking problems!

2.8 Tracking Performance

In order to achieve the best tracking performance for a long plot, we recommend some significant media loading procedures described as follows:

If the media length is less than 4 meters, leave the margin of 0.5mm—25mm in the left and right edges of the media (Figure 2-33).

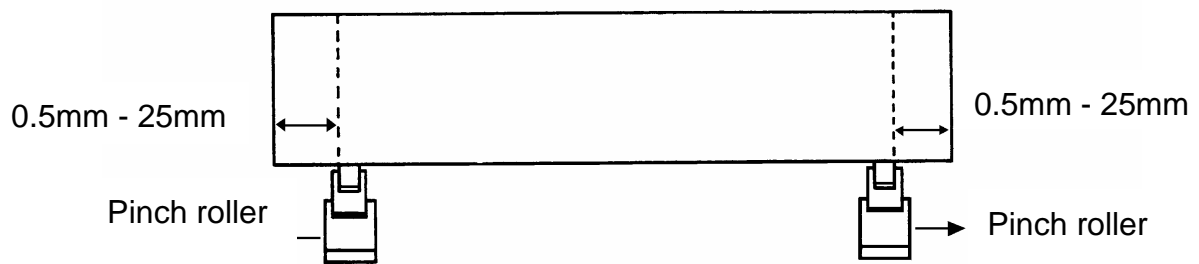


Figure 2-33

If the media length is greater than 4 meters, leave at least 25mm margin on the left and right edges of the media (Figure 2-34).

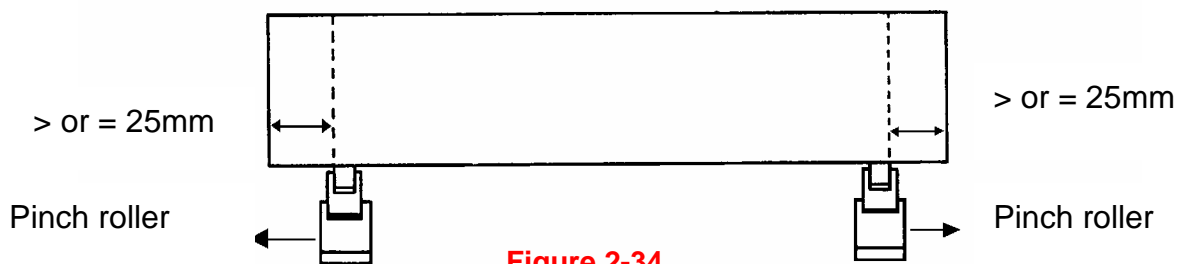


Figure 2-34

Please refer to the paragraph “2.11 How to Make A Long Plot” for more details.

2.9 Cutting Force and Offset Adjustment

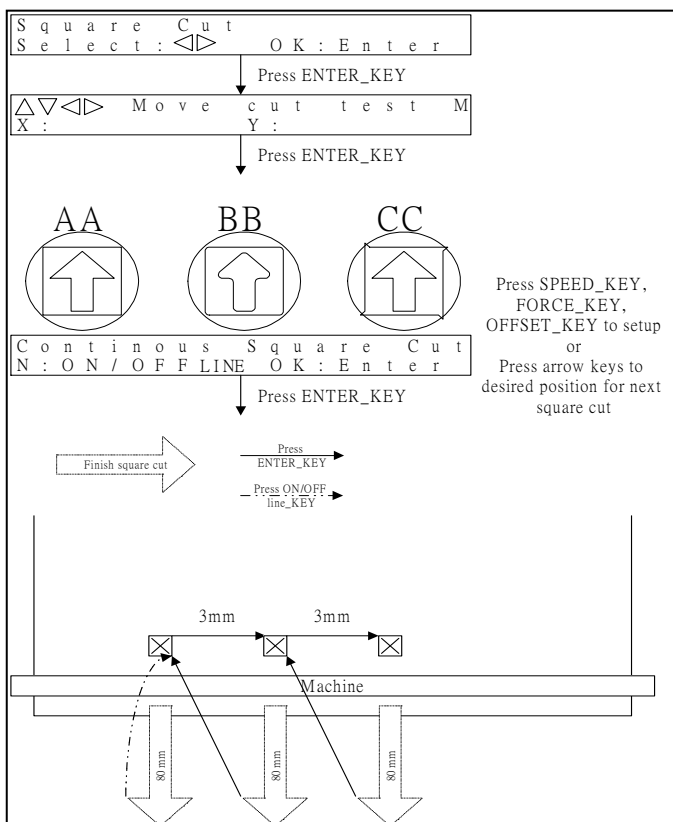
Before sending your designs for cutting, you may perform a “cut test” to generate satisfactory cutting results. The “Cut Test” should be repeated until the appropriate cutting conditions for the media are discovered.

After sizing the media, press [CUT TEST] button to select the “square cut”, and press [ENTER KEY] to confirm.

The default cutting force and offset value of the cutting test are 80gf and 0.275mm respectively. Press [ARROW KEY] to move the tool carriage to the position where you like. Then, press the [ENTER KEY] to perform Cut Test.

Note: At the same time, the new origin is also set at the cutting test position.

When the cutting test is completed, a pattern appears. Peel off the pattern to see if it can be easily separated from the media base. If yes, the setup tool force is appropriate. If not or cut through the back paper, press [FORCE KEY] to adjust the tool force until an optimum force is obtained (Figure 2-35).



If the pattern appears to be BB or CC layout, press [OFFSET KEY] to adjust the offset value until AA pattern discovered.

Figure 2-35

2.10 How to Cut 3mm Letters

To obtain good quality output, narrow media is recommended. However, if wide media is used, you should:

1. Position two pinch rollers as close as possible to both edges of the cutting area.
2. Make sure the loaded media is held flat with equal tension across the platen.
3. Suggested operation settings:

Tool force: 55 gf. (or depending on the material)

Cutting speed: 45-50 cm/sec

Tool up speed: 45-60 cm/sec

Smooth cut: Disable

Quality: Small Letter

2.11 How to Make A Long Plot

When you are making a long plot with a roll of heavy and wide vinyl, paper you need to use the "AUTO UNROLL MEDIA" function. The following parameter settings are to help users get the best cutting quality. The actual output quality may vary when using different kind of materials

1. If the length of graphic is between 3m and 5m, the cutting speed is better slower than 72cm/sec and the cutting quality is set as Normal.
2. If the length is longer than 5m or if the material type is difficult to cut, it is better to further slow down the cutting speed.
3. After loading the roll media all pinch rollers are raised at this stage, flatten the media on the platen and hold the front edge of the roll media firmly (Figure 2-36).

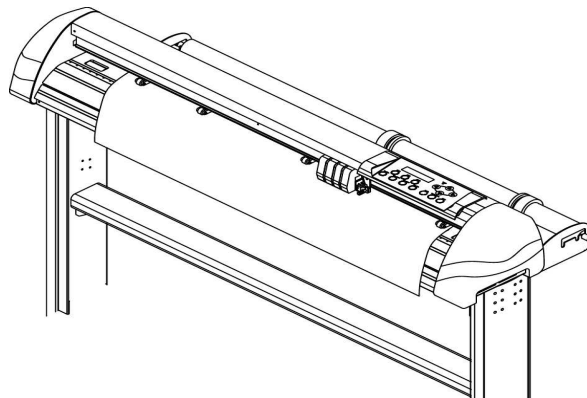


Figure 2-36

Then turn the roll downward to make an equal tension across the media (Figure 2-37).

Make sure that the media tension is equally distributed from left to right. If the media is not tight enough against the platen, it will cause tracking problems.

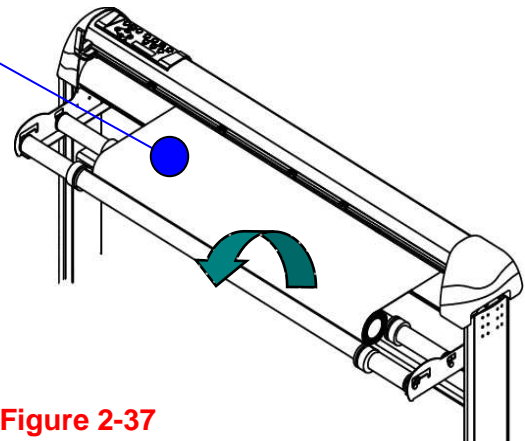


Figure 2-37

4. Engage pinch rollers.
5. Fixes roll media guide bushes on the roll holder to secure the roll media.
6. The protrusion length of the blade should be longer than the thickness of the vinyl. (Please check the "Blade Specification: About the Tool" in Appendix.) After you notice all the above, you'll enjoy your gigantic signs production!

2.12 When Completing the Cutting Job

After completing the cutting job, raise the sheet-loading lever, and then remove the material. You can also cut off the finished job by the Safe Blade (a standard accessory) along the knife guide. (Figure 2-38)

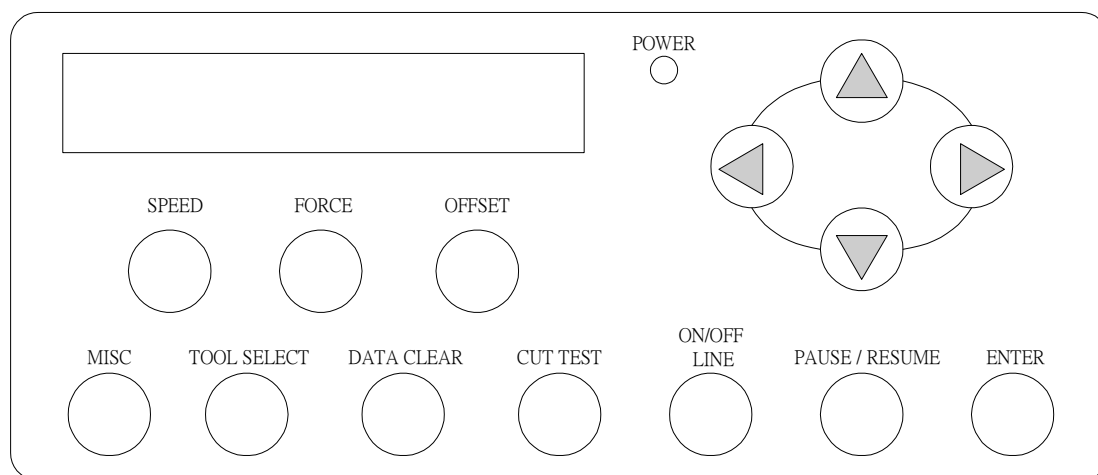


Figure 2-38

3. The Control Panel

This chapter describes the button operations with the LCM menu flowcharts of Jaguar II. When the cutting plotter is ready for use as described in Chapter 1 & 2, all functions are under default parameters.

3.1 The LCD Panel



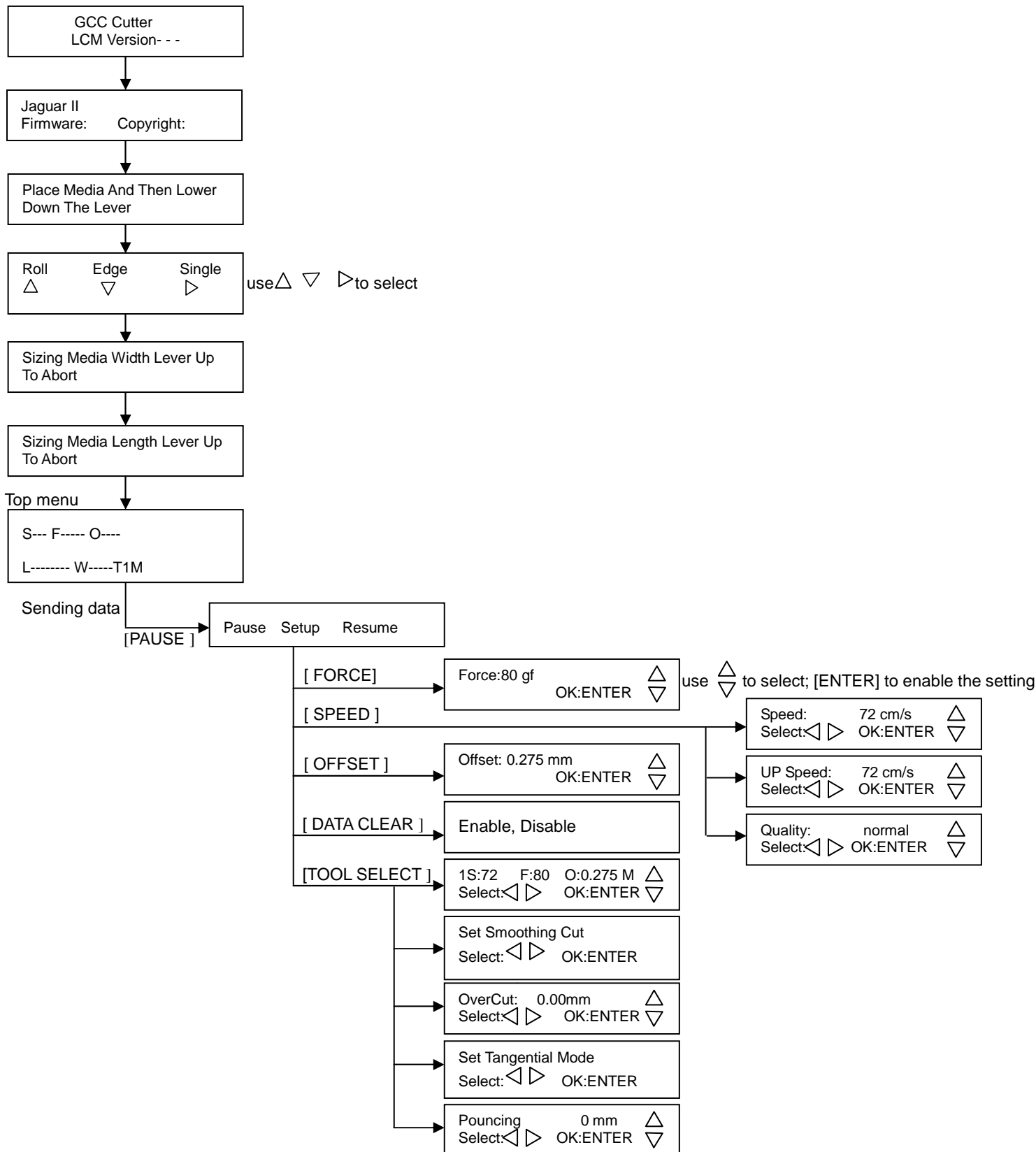
< LCD Control Panel on Jaguar II series >

Key	Function
LCD Screen	To display functions and error messages.
Power LED	To indicate the power status (light up: power on; light off: power off)
4 Arrow Keys	To move position, select function, or change setting.
ENTER	To set item or register the immediately preceding input value.
PAUSE/RESUME	To temporarily halt cutting process or to continue
ON/OFF LINE	To switch modes, stop cutting job, or abort changes of settings.
OFFSET	To adjust the value of blade's offset.
FORCE	To adjust the value of cutting force.
SPEED	To adjust the value of cutting speed and quality.
CUT TEST	To perform cutting tests on different media.
DATA CLEAR	To clear up buffer memory.
TOOL SELECT	To select tools.
MISC	To set up functions.

Please see details in ["3.4 Menu Items"](#)

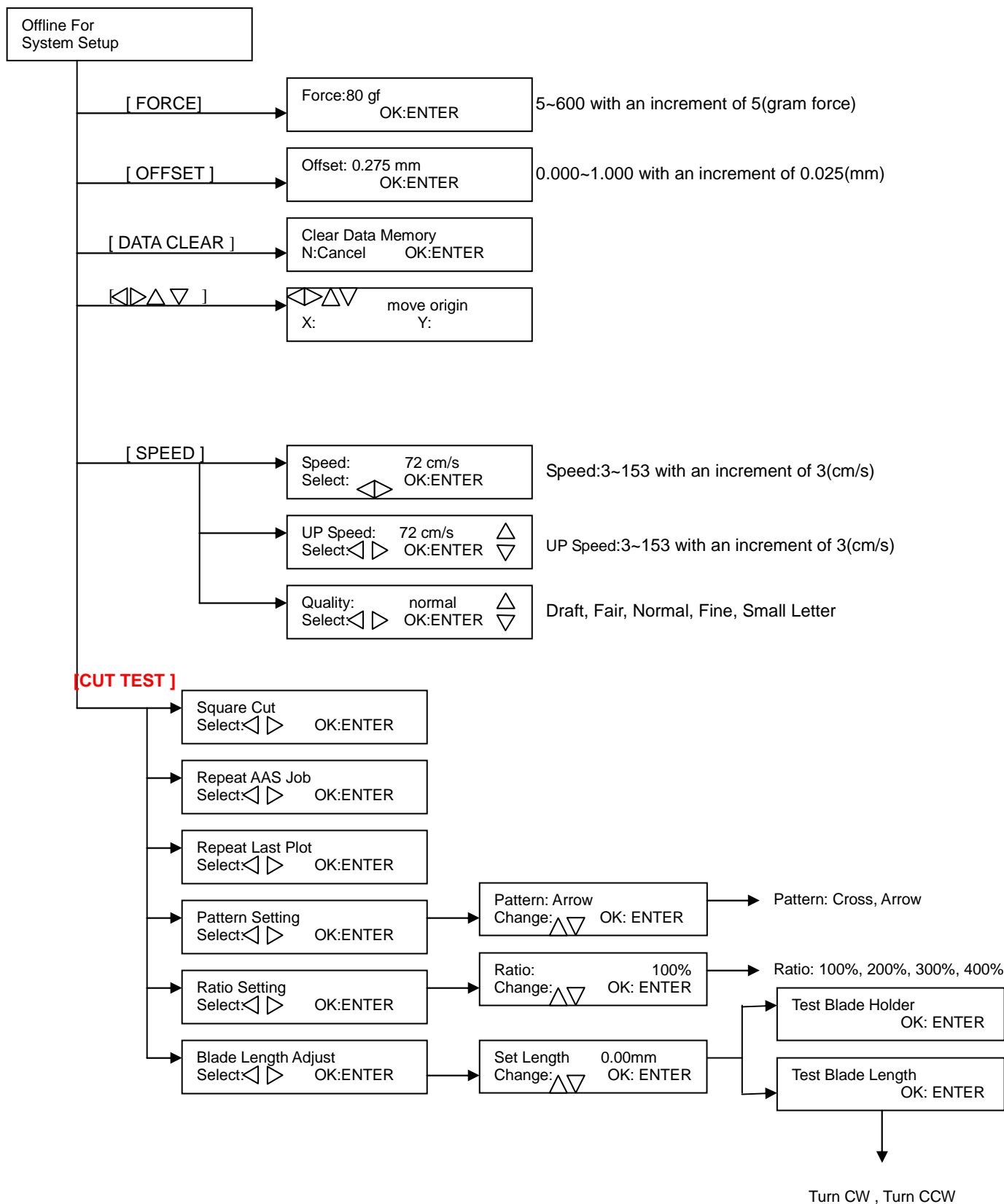
3.2 Menu in On-line Mode

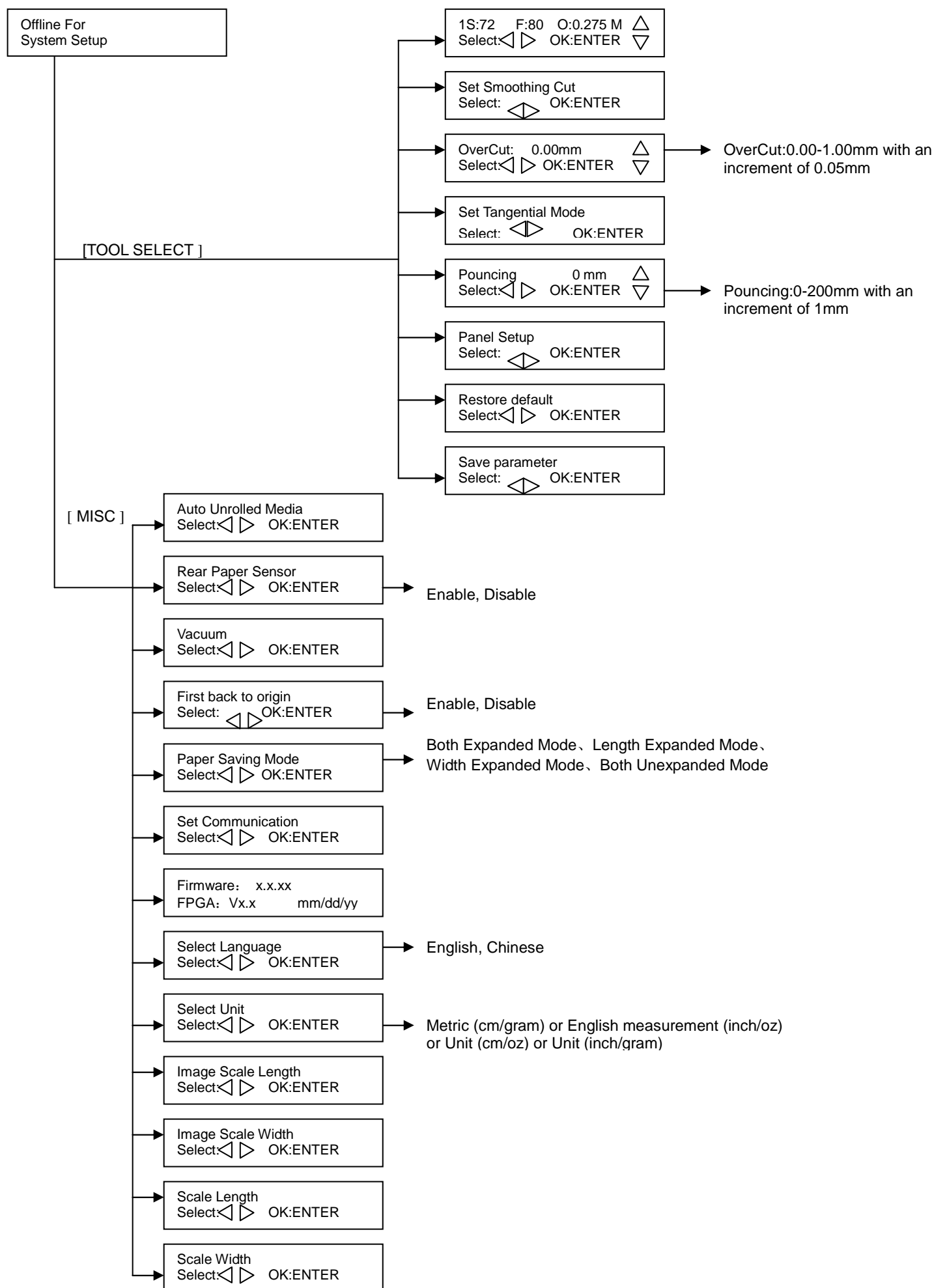
Power On Jaguar II in processing



3.3 Menu in Off-line Mode

Press [ON/OFF LINE] to switch to the offline mode





3.4 Menu Items

Below describes the functions of menu items

Menu or Key	Function	Setting	Default
Media sizing			
Roll	To measure media width.	Maximum Tracking 150 meters	
Edge	To measure media width and pull the media back till the front paper sensor open.	Maximum Tracking 150 meters	
Single	To measure media width and length.	Maximum Tracking 10 meters	
[SPEED]			
Speed	To set or modify tool speed at horizontal moving.	3~153cm/sec; 3cm/sec per step	72cm/sec
Up Speed	To set or modify tool speed at vertical moving.	3~153cm/sec; 3cm/sec per step	72cm/sec
Cutting Quality	To set or modify cutting quality. While cutting small letter, set as "Small letter". While cutting in high speed, set as "Draft". For normal operation, set as "Normal".	Draft, Fair, Normal, Fine, Small Letter	Normal
[FORCE]			
	To set or modify the value of tool force. For Jaguar II_61/101/132SC, when the cutting force exceeds 450g, the maximum cutting speed would be 15cm/sec and the cutting quality would be Small Letter Mode (0.2g) and while the cutting force is 300g-449g, the maximum cutting speed would be 30 cm/sec and the cutting quality would be Fine Mode (0.5g)	600gram; 5 gram/per step	80 gram
[OFFSET]			
	To set or modify the distance between the blade tip and the center axis.	0.000~1.000mm	0.275mm
[Arrow Keys]			
	1. To move the tool carriage position on X or Y axis. 2. To select functions or change values of settings.		
[ENTER]			
	1. The displayed parameters will be saved automatically. 2. To set a new origin at the present tool carriage position. In "offline" mode, moving the tool carriage to desired position by [Arrow Keys], then press [ENTER] key to set a new origin. While moving with the parameters of XY-axes displayed, press [MISC] key will enable fine-tune movement; press [MISC] key again to disable the function.		
[PAUSE/RESUME]			
	To temporarily halt the cutting process. To resume the process by press [Pause/Resume] key again.		
[ONLINE/OFFLINE]			
	1. To switch between online mode and offline mode. 2. To stop the cutting job or abort the change of setting. Once press this key, the cutting job will be terminated immediately and cannot be resumed.		
[DATA CLEAR]			

	To clear up buffer memory.		
[TOOL SELECT]			
Save Parameter	To save pattern(s) of cutting parameters for later use. There are 4 sets of parameters saved in the panel. Use Page Up and Page Down keys to select the set of parameters you wish to adjust, press "Enter" to confirm (the number shown on the upper left corner will change accordingly). Each set of parameters includes Speed, Force, Offset, Up Speed, Quality and Scaling though the latter three will not be displayed in this section. To adjust or check individual parameters, go back to the responding keys on the panel and press "Enter" to confirm.	Patterns1~4	Pattern 1
Set Smoothing Cut	To enable smooth-cutting function.		Enable
Over Cut	To generate an overcut to facilitate weeding.	0.00mm-1.00mm 0.05mm/per step	0.00mm
Set Tangential Mode	To enable the emulated tangential-cutting mode for thicker media types and small letter cuts. Note: while the Offset value setting at 0.000 mm, "Set Tangential Mode" will automatically be disabled.		Enable
Pouncing	To make perforated patterns. * In order to use this function, Pouncing tool must be installed. * Before start pouncing, place pouncing strip on top of the cutting pad to protect the cutting pad. * Set the value as 0 mm to disable the pouncing mode. * Pouncing tool is an optional item.	0~200mm	0mm
Panel Setup	Accept setup command: To accept commands of the Force, Speed, Cutting Quality, and Offset only via software.		
	Control panel only: To accept commands of the Force, Speed, Cutting Quality, and Offset only via control panel of the cutter.		
Restore Default	To turn all parameters of the menu items to factory-default settings.		
[MISC]			
Auto Unrolled Media	To avoid paper jam and motor crash by automatically unroll media (50cm and up) before cutting while enabled. * Auto-unroll only effects on roll/edge media. * Using Single mode to size media will disable this function automatically. * If the length of the rolled media is less than 2 meters or the weight is light, it is recommended to set this mode disabled.		Enable
Rear Paper Sensor	To detect if the rear paper sensor is covered to determine the following process; when it is enabled, the cutter will detect if the material has covered the rear paper sensor under the Roll and Edge mode; when disabled, the rear paper sensor will not be functioning. Note: Rear paper sensor only functions under "Roll" and "Edge" mode.	Enable Disable	Enable
Vacuum	To help improve tracking and cutting accuracy by turning on the fans. If you turn off the vacuum system, the fans will remain inactive during cutting or plotting.		Enable
First Back to Origin	To enable the carriage back to the previous origin; when "Enable" is selected, the carriage will not go back to the	Enable Disable	Enable

	previous origin while the selection of "Disable" allows the carriage to do so.		
Set Communication	<p>To build up the communication between host computer and cutter.</p> <p><i>Baud Rate</i> is to determine the speed of data transmission.</p> <p><i>Data Bits</i> refers to the size of one block of data.</p> <p><i>Parity</i> is used to check if data was revived correctly or not.</p> <p>9600, n, 7, 1, p 9600pbs, 7 Bits with NO Parity</p> <p>9600, o, 7, 1, p 9600pbs, 7 Bits with ODD Parity</p> <p>9600, e, 7, 1, p 9600pbs, 7 Bits with EVEN Parity</p> <p>9600, n, 8, 1, p 9600pbs, 8 Bits with NO Parity</p> <p>9600, o, 8, 1, p 9600pbs, 8 Bits with ODD Parity</p> <p>9600, e, 8, 1, p 9600pbs, 8 Bits with EVEN Parity</p> <p>19200, n, 7, 1, p 19200pbs, 7 Bits with NO Parity</p> <p>19200, o, 7, 1, p 19200pbs, 7 Bits with ODD Parity</p> <p>19200, e, 7, 1, p 19200pbs, 7 Bits with EVEN Parity</p> <p>19200, n, 8, 1, p 19200pbs, 8 Bits with NO Parity</p> <p>19200, o, 8, 1, p 19200pbs, 8 Bits with ODD Parity</p> <p>19200, e, 8, 1, p 19200pbs, 8 Bits with EVEN Parity</p>		
Firmware Version	To display the version number of Firmware and FPGA code.		
Paper Saving Mode	<p>To save media by four different modes:</p> <p>1. Length expanded mode 2. Width expanded mode</p> <p>3. Both expanded mode 4. Both unexpanded mode</p>		Both unexpanded mode
Select Language	To select displayed languages on LCM panel in English and Chinese	English Chinese	English
Select Units	Provide four-unit systems for users convenient.	cm/gram; inch/oz; cm/oz; inch/gram	Metric
Image Scale Length	<p>To adjust the image scale of media length and width that may cause by the thickness of the media.</p> <p>The Numerator is the ideal length, and the Denominator is the actual length measured from the resultant.</p> <p>For example, cutting a line with 500.0 mm length. The procedure as follows:</p> <p>1. Press the [LEFT ARROW] to choose the Numerator and select 500.0 mm,</p> <p>2. Cut the length by sending a graph file,</p> <p>3. Measure the length then use the [RIGHT ARROW] key to choose the Denominator, then</p> <p>4. Press [UP ARROW /DOWN ARROW] to change the values of the actual length.</p>		500/500 mm
Image Scale Width			
Scale Length	Fixed scaling, for maintenance only.		
Scale Width			
[CUT TEST]			
Square Cut	<p>To perform a cutting test at present blade position.</p> <p>For more information, please refer to "2.7 Adjusting the Cutting Force and Offset" to adjust blade force and cutting speed.</p>		
Repeat Last Plot	<p>Recut:</p> <p>To repeat the last job without re-sending the data.</p>	1~99; 1 per step	

	<p>Copy: To copy the last job without re-sending the data. * 1mm gap will be auto-generated between 2 copies. * If the media length is not enough to continue, it will show below message on LCM:</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Out Of Space ; # of Copies finished </div> <p>* If both functions are enabled at the same time, the cutter will perform the last setting only.</p>	1~99; 1 per step	
Pattern Setting	<p>To provide two patterns for cut test Note: It is recommended to select "Cross" if you are working on thick pieces of materials.</p>	"Arrow" and "Cross" patterns	"Arrow" Note: the default pattern for Jaguar II_61/101/132SC is "Cross"
Ratio Setting	To adjust the size of the pattern	100%, 200%, 300%, 400%	100%
Blade Length Adjust	<p>To adjust the length of the blade Note:</p> <ol style="list-style-type: none"> 1. Keep your blade length as 0 before you start adjusting. 2. Test the blade holder first and then test the blade length by pressing ENTER. 3. Keep the blade holder at the same position when you perform blade holder and blade length tests. 4. When blade holder and blade length tests are finished, the screen will show you to what degree (the unit of the value following "CW" or "CCW" is "circle") and in which direction [CW (clockwise) or CCW (counterclockwise)] you should turn the adjustment knob. EG, Turn CW 0.5 is telling you that you should turn the knob for half a circle clockwise. 5. The value on the screen will be 0.0 when the blade length is perfect and no more adjustment needs to be made. You may start cutting at this point. 	0.00mm-5.00mm	0.00mm

4. Connection

The cutting plotter communicates with a computer through a **USB (Universal Serial Bus)** or a **Serial port (RS-232C)**. This chapter shows you how to connect the cutting plotter to a host computer and how to set up the computer/cutting plotter interconnection.

!! Notice: When USB connection is enabled, serial port will be disabled automatically.



Serial Interface Connector (RS232C) – used to connect the cutting plotter to a computer through a serial interface cable.

USB Connector – used to connect the cutting plotter to a computer through a USB cable.

4.1 USB Interface

Jaguar II build-in USB interface are based on the Universal Serial Bus Specifications Revision 1.1. (Operation system of Windows 95, Windows NT don't support USB).

■ USB driver installation

Caution!!

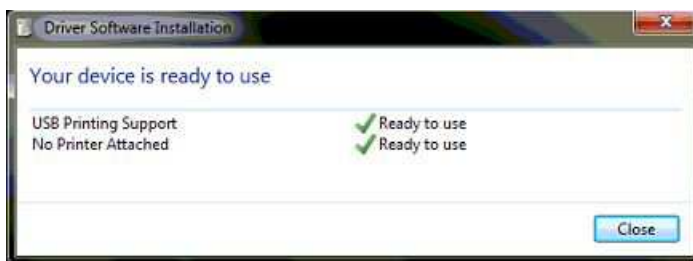
- ✓ If you are using Windows 8/ 7/ Vista/ XP/ 2000 as your operating system, make sure you log in using the “Administrator” account.

Use the USB One-click Installation for quick driver installation. Follow the simple steps below for driver setup.

Step 1:

Connecting your GCC cutter

1. Turn on the machine.
2. Connect the USB connector to the machine and then USB driver will installed automatically. It will take a few minutes to find the device. Please DO NOT disconnect the USB cable until the installation has completed.
3. You can double click the USB icon on the taskbar to make sure the USB device is detected.

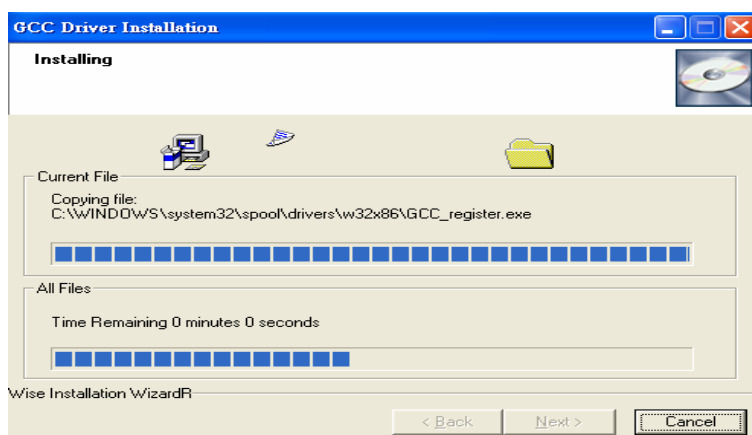
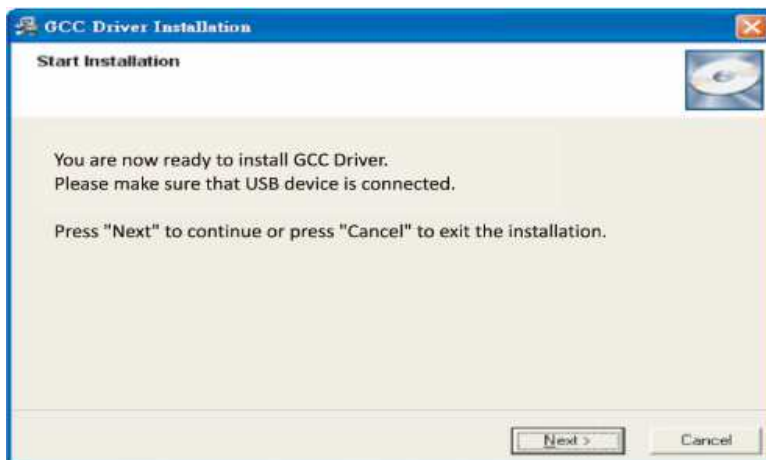


Step 2: Installing the software

- (1) Put the installation CD into your CD-ROM. **Please make sure that the USB device is connected before you start the driver installation.**
- (2) Choose the model you want to install from the driver list and click on Win 8/ 7/ Vista/ XP Driver (Manual Selection) or Win 8/ 7/ Vista/ XP Driver (Automatic detection) to start installing the Driver and AAS plugin.



(3) Click “Next” to start the driver installation.



(4) The installation will take a few minutes to complete and you will see a message below and click on “OK” upon completion. Enjoy your GCC cutter!



Note:

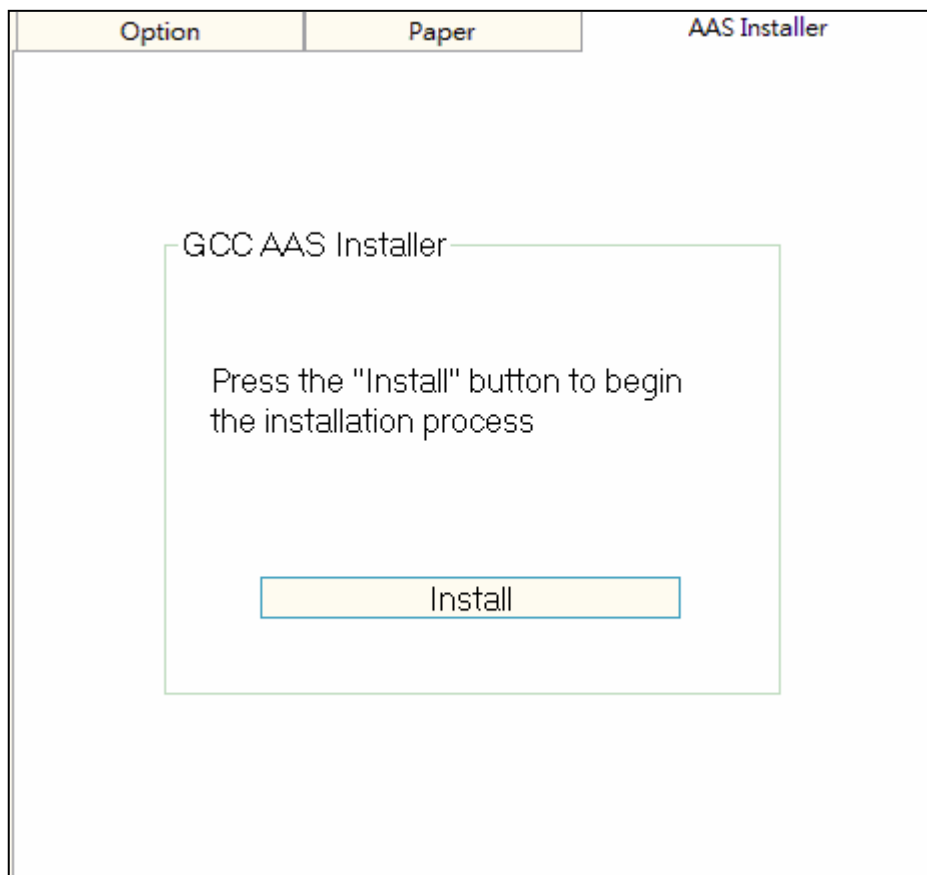
- (1) If the driver is being installed for a second time, the user will be prompted as to whether a second copy of the driver installation is required.



- (2) If the user selects yes, a second copy of the driver will be installed.



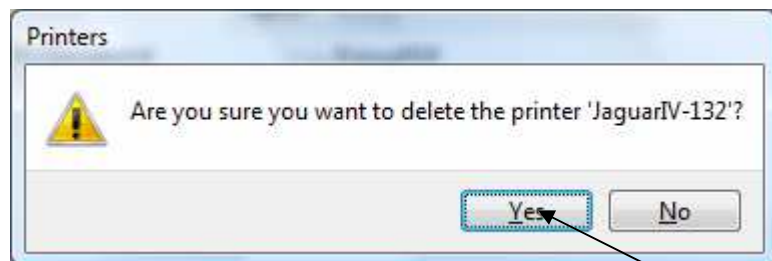
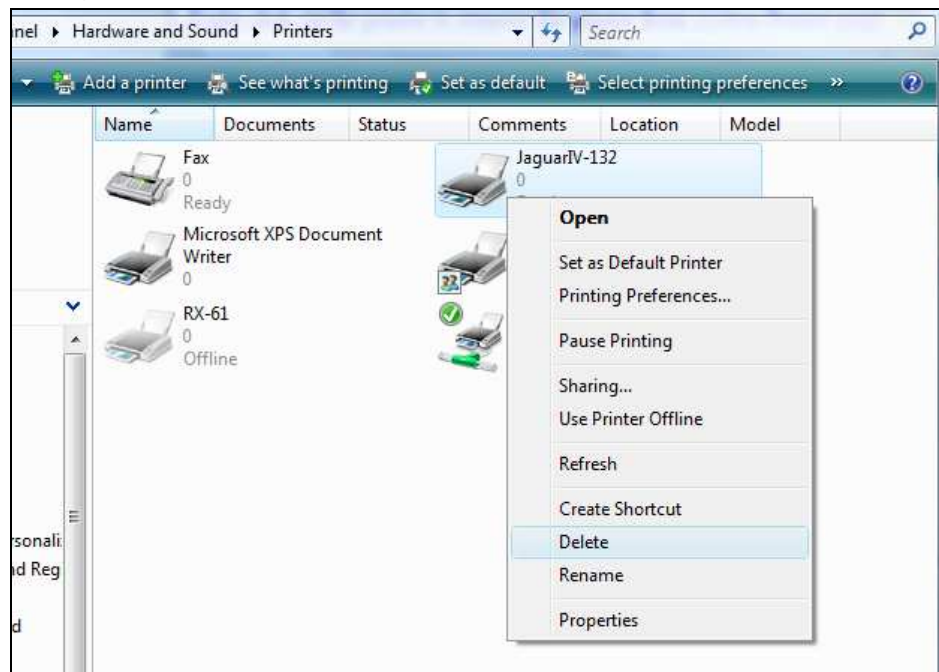
For users who have upgraded Adobe Illustrator or CorelDRAW, please go to the AAS Installer page in the Properties window and click Install to access the latest version of GCC AAS Plugin.



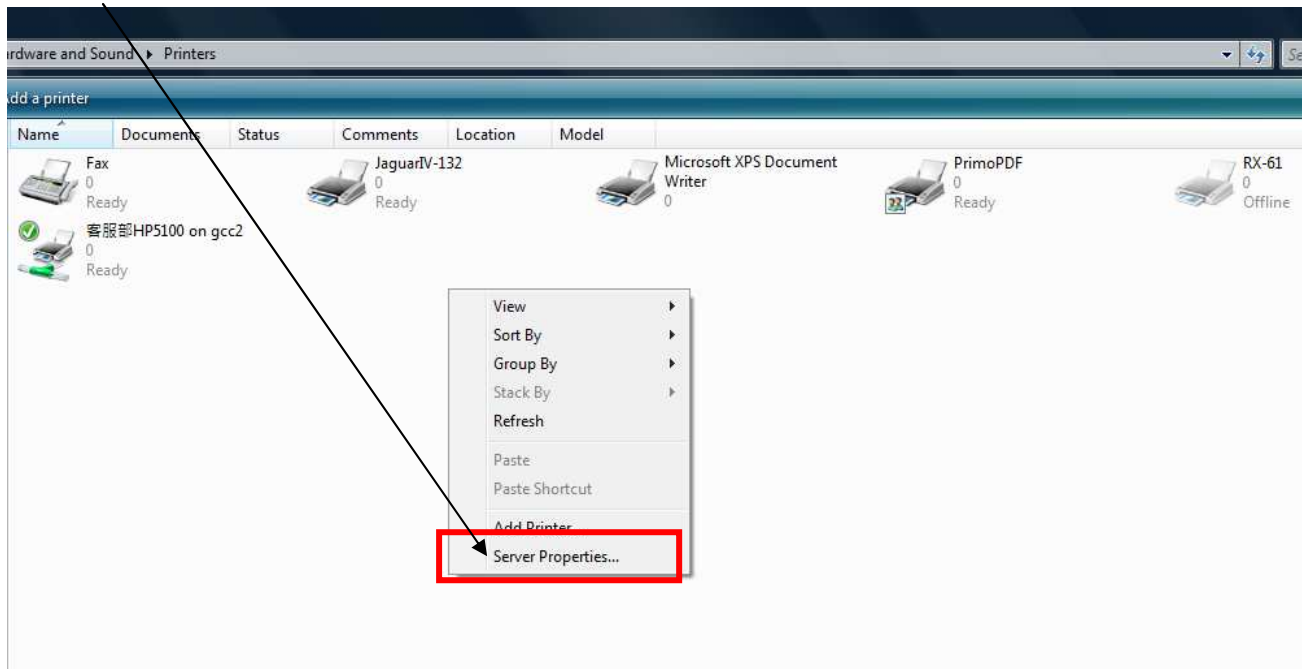
4.2 Driver Un-installation

You have to remove previous version driver installed on your PC system completely before you can install the latest version successfully. Please refer to below steps.

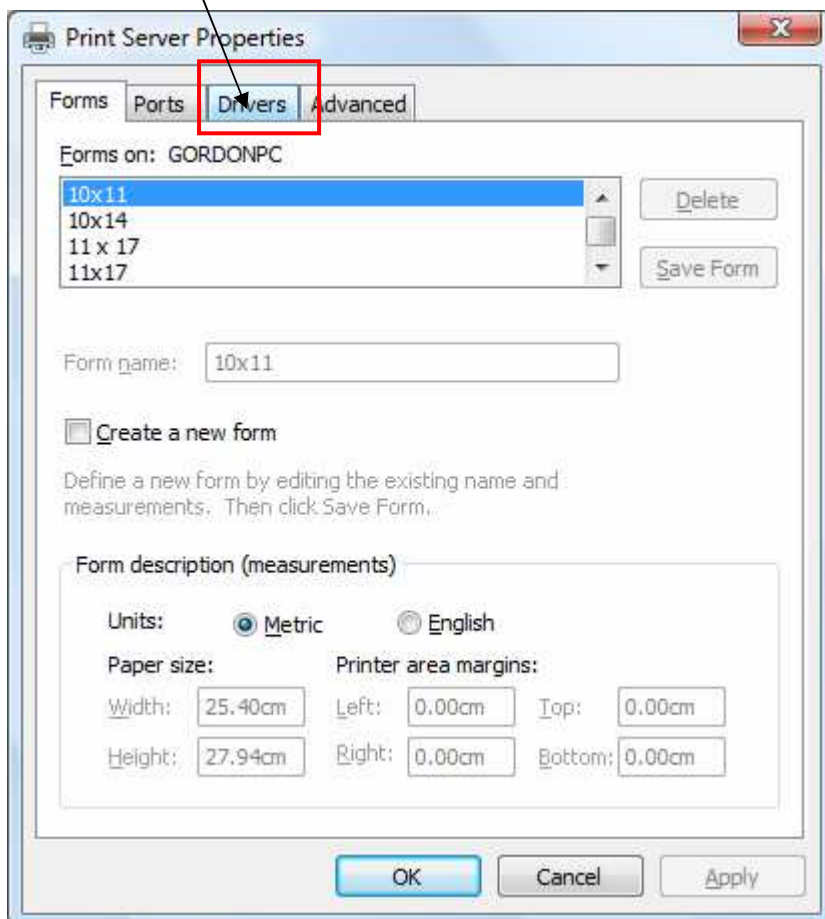
1. Right click on the printer to remove the printer from system Printer page.

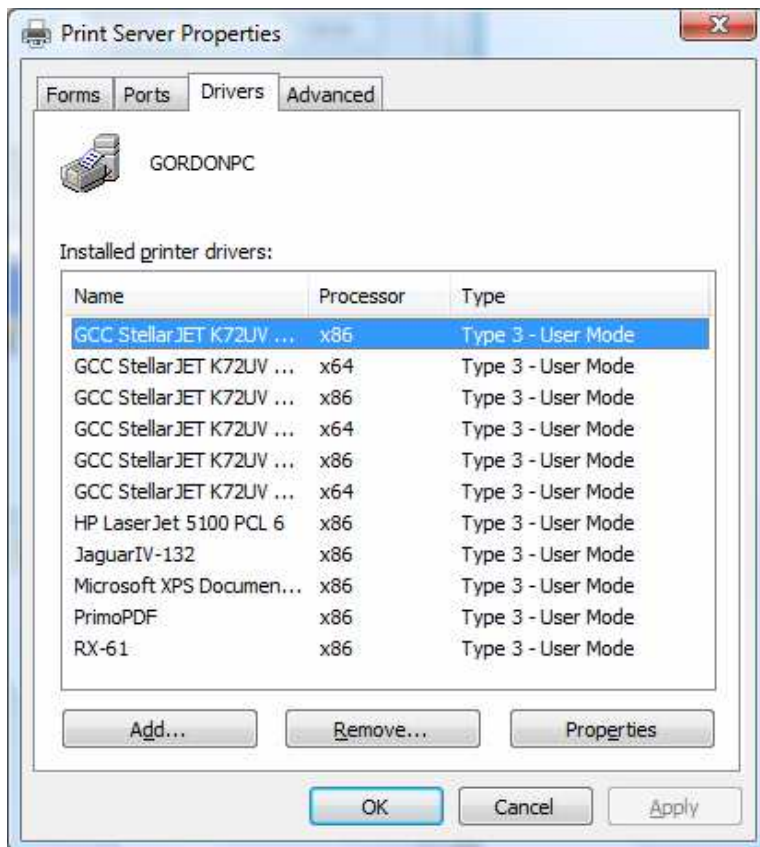


2. After removing the unit, right click on any empty space on the page and select “Server Property”



3. Select "Driver" page

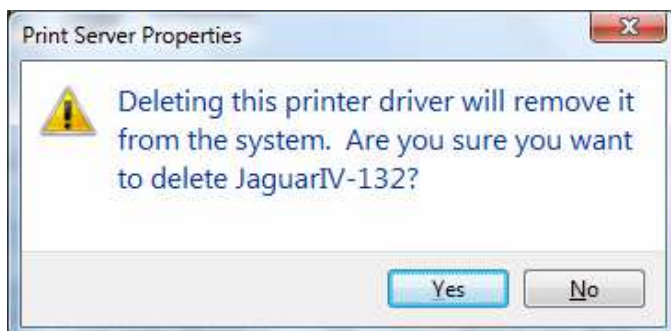




Select the model and click on “Remove”.



Click on “OK”



Click on “Yes”

The driver installed on PC is completely removed.

4.3 RS-232 Interface

- Connecting to the RS-232 (Serial) Port
 1. For IBM PC, PS/2 users or compatibles, connect the RS-232C cable to the serial connector of the assigned serial port (COM1 or COM2) of your host computer.
 2. Set up the communication parameters (Baud Rate and Data Bits/Parity) to match the setting of software package, refer to chapter 3 – “Misc” key description.

Caution!! Please turn off the plotter before plugging the RS-232C cable.

4.4 Data Transmitting

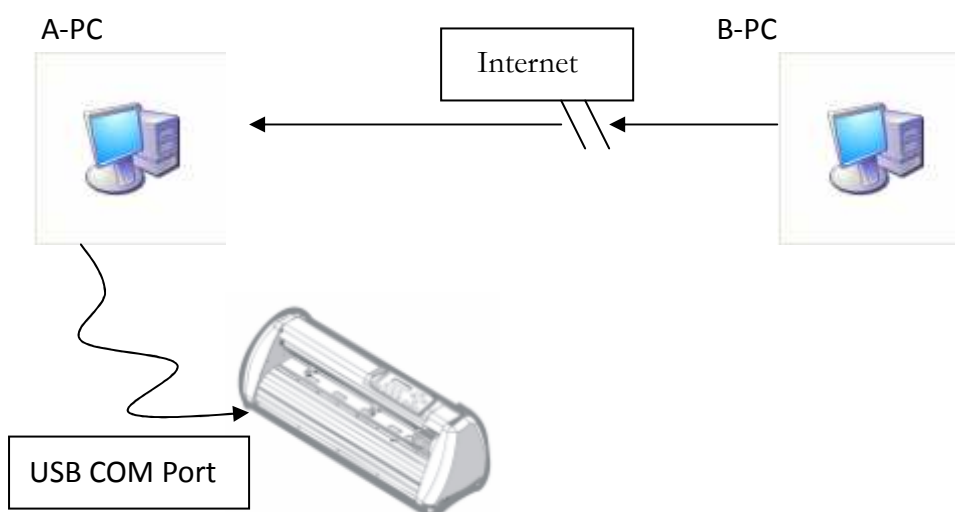
There are two options to transmit the data from the computer to the cutting plotter:

Option 1: With proper interface settings, the data can be transmitted from your application software package to the cutting plotters directly.

Option 2: Most cutting software packages are able to emulate **HP-GL** or **HP-GL/2** commands, therefore. As long as the file is **HP-GL** or **HP-GL/2** format, the cutting plotter can output the data precisely.

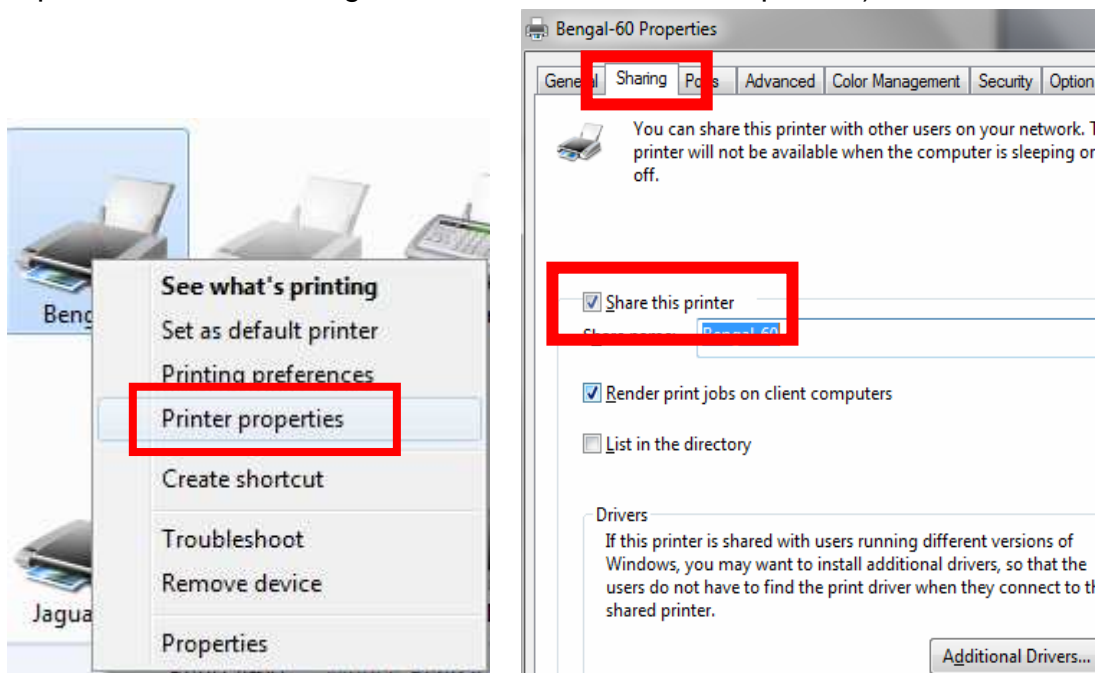
4.5 Printer Sever Shared Setting

In “A-PC”, set the printer driver as a shared printer, then use B-PC to connect A-PC’s printer driver via internet.

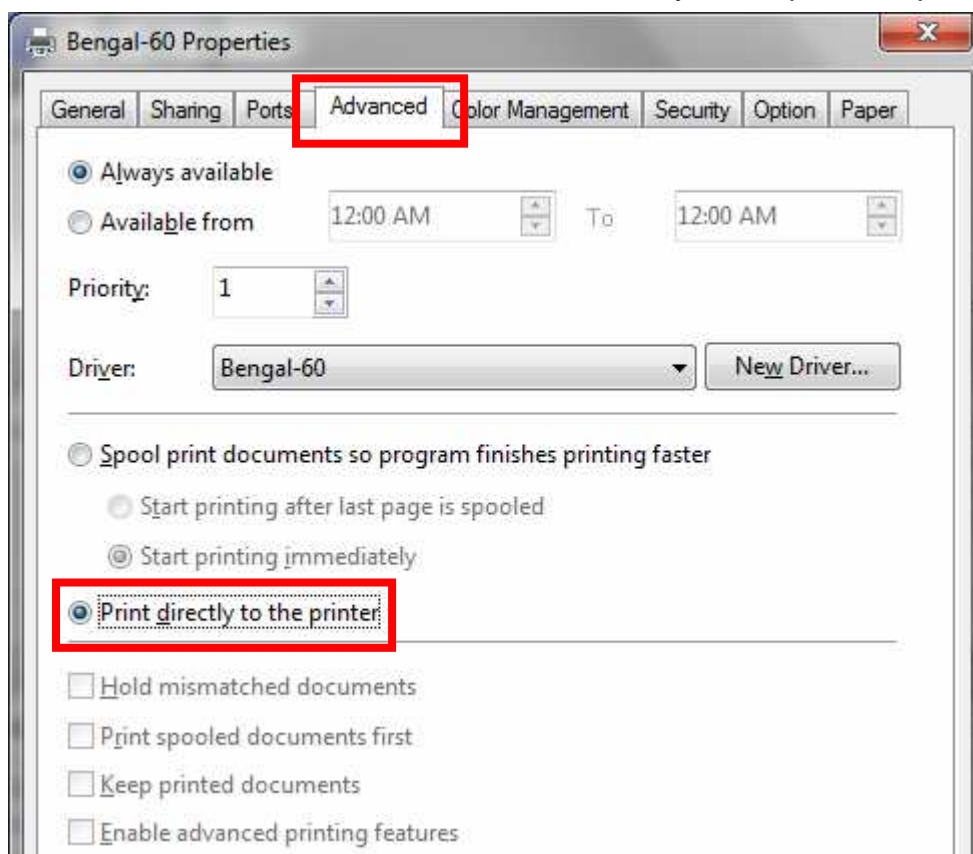


Step 1.

Please set A-PC's printer driver to shared printer. (Right-click on printer icon, choose "Printer properties". Click "Sharing" tab then check "Share this printer")

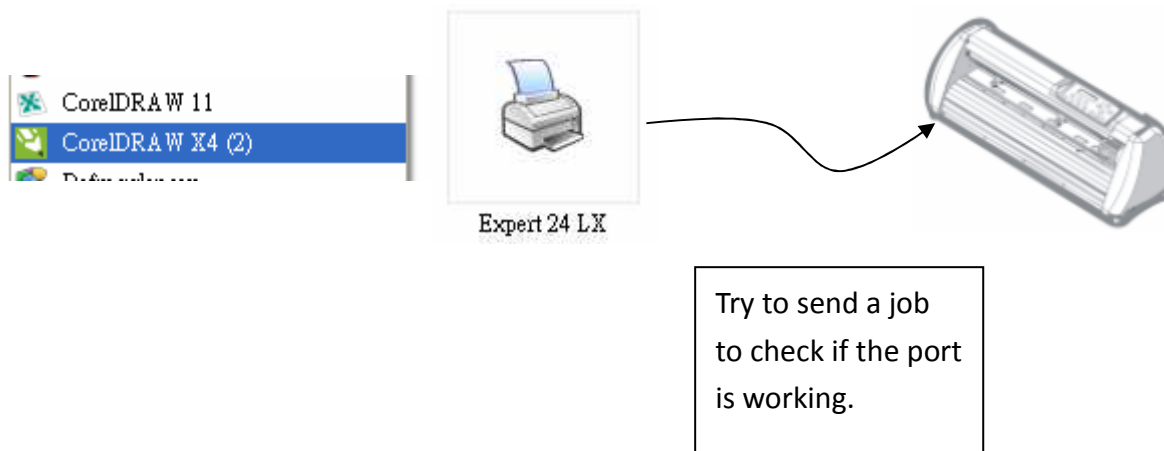
**Step 2.**

Click "Advanced" tab, then choose "Print directly to the printer" option.

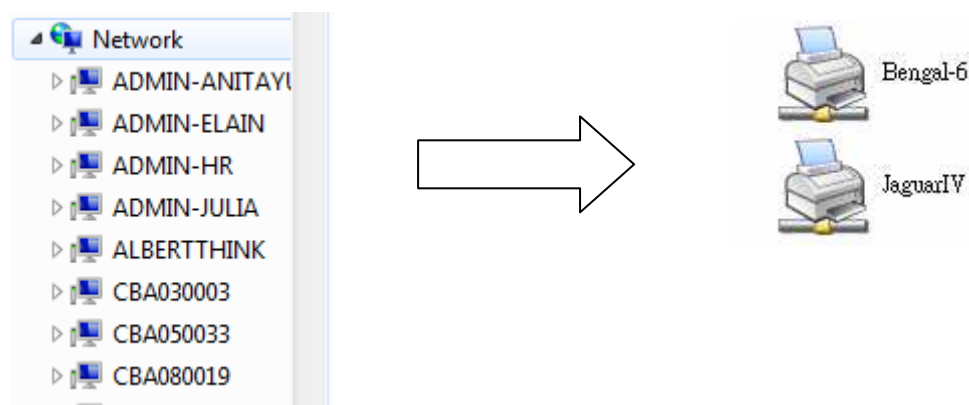


Step 3.

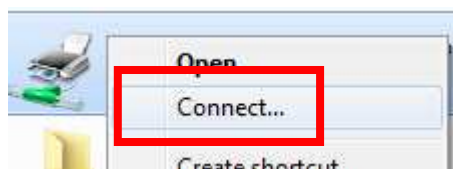
Send a job to the machine to check if A-PC is connected to the machine.

**Step 4.**

Activate A-PC's Printer Driver from B-PC's Network.

**Step 5.**

Right-click on printer icon, and select "Connect" to connect A-PC's printer.



4.6 Jaguar II Print Driver setting

4.6.1 Jaguar II Print Driver setting>Option Page

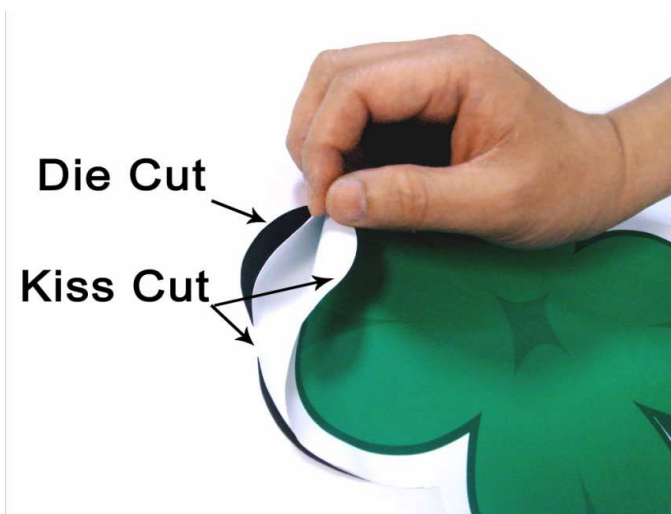
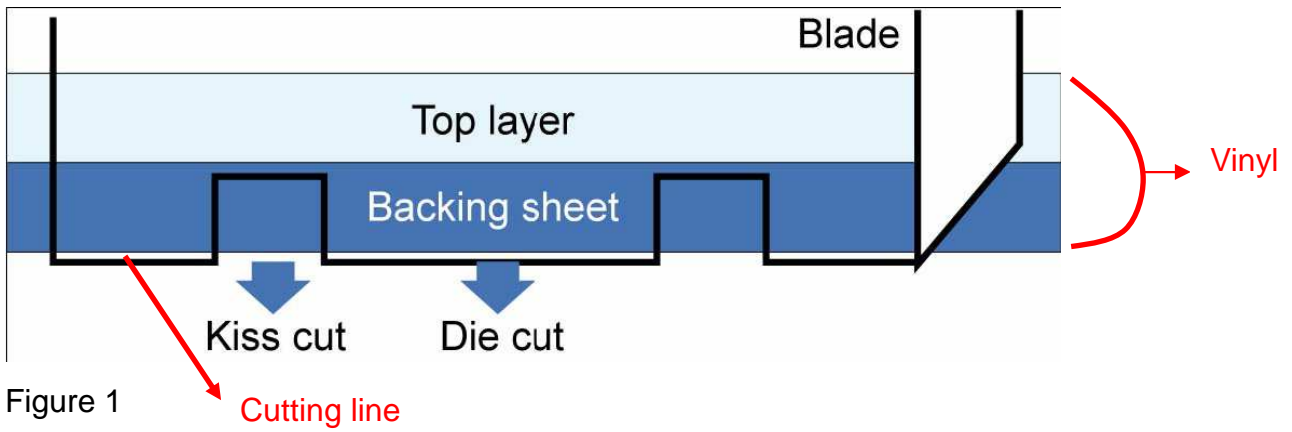
File Function:

The file function section allows users to set the parameters of Speed, Force, Offset and Quality for later use. This section is useful when performing repeated jobs on a variety of objects, allowing you to save your frequently used cutter parameters and load them in the future.

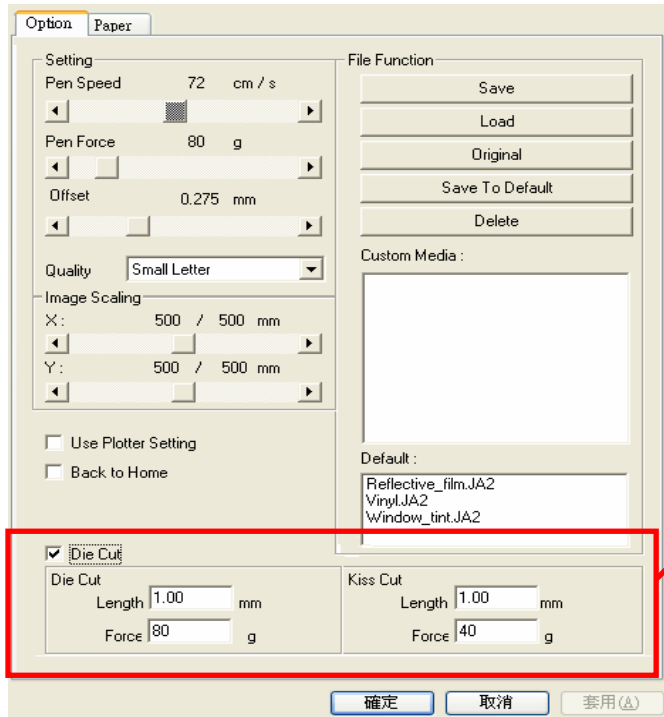
- **Custom Media:** This section lists the files for the parameter settings that you have recently created and worked. You can save more than 50 files to simplify your cutting job.
- **Default:** This section contains the reference settings that are applicable with the verified materials to achieve the best cutting results. Please note that the setting value might need to be adjusted according to different suppliers of materials.
- **SAVE:** This function will save current print driver parameter settings to a file under the specified location on your computer. (Saved parameter setting files will be tagged with the Jaguar series extension)
- **LOAD:** This function allows you to load previously saved print driver parameters.
- **ORIGINAL:** This function will load the print driver's original factory parameter settings.
- **SAVE TO DEFAULT:** This function allows you to save your current print driver parameters as the default startup settings.
- **DELETE:** This function will delete the file you select from the Custom Media section, whereas the settings in Default section cannot be deleted. Please note the delete function only removes the list shown in Custom Media section, it does not remove the file from your hard drive, if you wish to completely remove the file from your hard disk, you will have to manually delete the file from your operating system.

Die Cut

The Die Cut function must be activated with the Kiss Cut function to avoid the falling of cut-through materials and material jam beneath the carriage. Die Cut helps you to cut through the backing of the material while Kiss Cut cuts through only the top layer but not the backing. This will leave only tiny bits of the backing attached to the top layer, creating complete individual patterns with backing sheets (see figure 1 and 2).



To activate the Die Cut function, go to “Option”, tick “Die Cut”, and enter the amount you wish for the “Length” and “Force” of both Die Cut and Kiss Cut, then click “OK” (see figure 3).

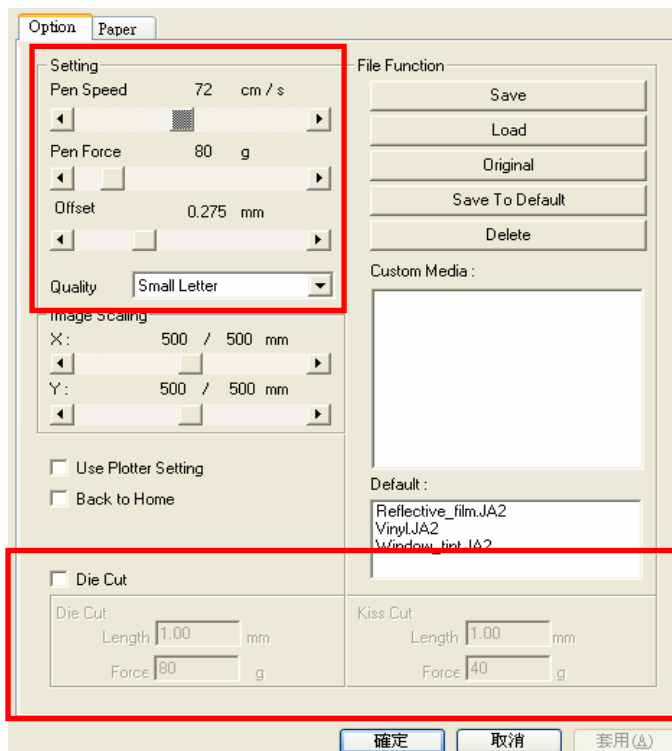


*Note:

The length setting for the cutting line of Die Cut is in the range of 0-2000mm whereas that of Kiss Cut is 0-100mm.

Figure 3

When the job is completed and you untick the Die Cut function, you will be able to adjust the pen speed, pen force, and offset in the section on the top following normal operating procedures (see figure 4).



Note:

1. The extension of the blade has to be set to cut through both the top layer and the backing in the very beginning. You then adjust the tool force for the best cutting performance.
2. Once the Die Cut function is activated, it will perform on all the line segments on the object.

Figure 4

4.7 Reference Parameter setting for different materials

The following reference parameter is used on GCC verified materials shown in the table.

Material	Wall stickers	Magnets	Protective tint	
Blade	red	green	green	
Blade tip length (mm)	0.3	0.8	0.3	
Force (g)	95	580	320	
Speed (cm/sec)	72	3	3	
Offset (mm)	0.275	0.5	0.5	
Recommend model	RX, Jaguar	RX, Jaguar	RX, Jaguar, Puma, Bengal, Sable, Ex Pro, Ex 24/52, Ex 24/52 LX	
Material	Vehicle stickers	Reflective film	Cardboard	
Blade	red	green	green	
Blade tip length (mm)	0.27	0.5	0.3	
Force (g)	85	380	165	
Speed (cm/sec)	60	3	30	
Offset (mm)	0.275	0.5	0.5	
Recommend model	RX, Jaguar, Puma, Bengal, Sable, Ex Pro, Ex 24/52, Ex 24/52 LX	RX, Jaguar, Puma, Bengal, Sable, Ex Pro, Ex 24/52, Ex 24/52 LX	RX, Jaguar, Puma, Bengal, Sable, Ex Pro, Ex 24/52, Ex 24/52 LX	
Material	Window tint	Window decoration	Personalized stickers	Rhinestone
Blade	red	red	red	green
Blade tip length (mm)	0.09	0.25	0.28	0.8
Force (g)	70	95	105	190
Speed (cm/sec)	72	65	72	15
Offset (mm)	0.275	0.275	0.275	0.5
Recommend model	RX, Jaguar	RX, Jaguar	RX, Jaguar	RX, Jaguar IV, Puma III

5. Maintenance

This chapter explains the basic maintenance (i.e. cleaning the cutting plotter) required for the cutting plotter. Except for the procedures mentioned below, all other maintenance must be performed by a qualified service technician.

5.1 Cleaning the Cutting Plotter

Cleaning the machine properly and regularly will ensure optimal performance out of your machine.

Cleaning Precaution !



- *Unplug the cutting plotter before cleaning it in order to prevent electrical shock.*
- *Never use solvents, abrasive cleaners or strong detergents for cleaning. They may damage the surface of the cutting plotter and the moving parts.*

Recommended Methods:

- Gently wipe the cutting plotter surface with a lint-free cloth. If necessary, with a damp cloth immersed in water or alcohol. Dry and wipe any remaining residue off a soft, lint-free cloth.
- Wipe all dust and dirt from the tool carriage rails.
- Use a vacuum cleaner to empty any accumulated dirt and media residue beneath the pinch roller housing.
- Clean the platen, paper sensors and pinch rollers with a damp cloth immersed in water or alcohol, and dry with a soft, lint-free cloth.
- Wipe dust and dirt from the stand.

5.2 Cleaning the Grid Drum

1. Turn off the cutting plotter, and move the tool carriage away from the area needed to be cleaned.
2. Raise the pinch rollers and move them away from the grid drum for cleaning.
3. Use a bristle brush (a toothbrush is acceptable) to remove dust from the drum surface. Rotate the drum manually while cleaning. Refer to Figure 5-1.

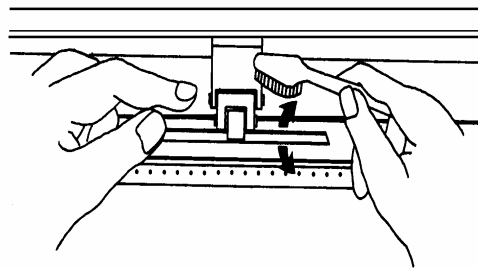


Figure 5-1

5.3 Cleaning the Pinch Rollers

1. If the pinch rollers require a thorough cleaning, use a lint-free cloth or cotton swab to wipe away the accumulated dust from the rubber portion of the pinch rollers. To prevent the pinch rollers from rotating while cleaning, use your finger to hold the pinch rollers to prevent them from rotation
2. To remove the deeply-embedded or persistent dust, use the lint-free cloth or cotton swab moistened with rubbing alcohol.

Note: The daily maintenance of your cutting plotter is very important. Be sure to clean up the grid drum and pinch rollers regularly for better cutting accuracy and output quality.

6. Trouble Shooting

This chapter is to help you correct some common problems you may come across. Prior to getting into the details of this chapter, please be sure that your application environment is compatible with the cutting plotter.

Note:

Before having your cutting plotter serviced, please make certain that the malfunction is in your cutting plotter, not the result of an interface problem or a malfunction in your computer or a software problem.



Why is the cutting plotter not functioning?

Possible Causes:

6.1 Non-Operational Problems

Check the following first:

- Does the AC power cord plug in properly?
- Does the AC power cord connected to the power connector properly?
- Does the power LED still illuminate?

Solutions:

If the LCM is able to display the message, the cutting plotter should be in a normal condition. Switch off the cutting plotter and turn it on again to see if the problem still existing.

If the LCM is not able to display any message, contact the technician from your dealer.

6.2 Operational Problems

Some mechanical problems or failure during operation will cause some problems. The error messages shown on the LCM present the problem first, and followed by recommended actions. If the problem still exists after the recommended actions have been done, have your cutting plotter serviced.

**Error, Check Media
Or Drum or X Motor**

This message indicates that there might be a problem on the **X axis**. Check if the drum is working well and if the media is well loaded. Correct the problem and re-power on to reboot system.

**Error, Check Media
Or Y Motor**

This message indicates that there might be an obstruction to carriage relating to a problem on the **Y axis**. Correct the problem and re-power on to reboot system.

**Error, Check Carriage
Sensor or VC Motor**

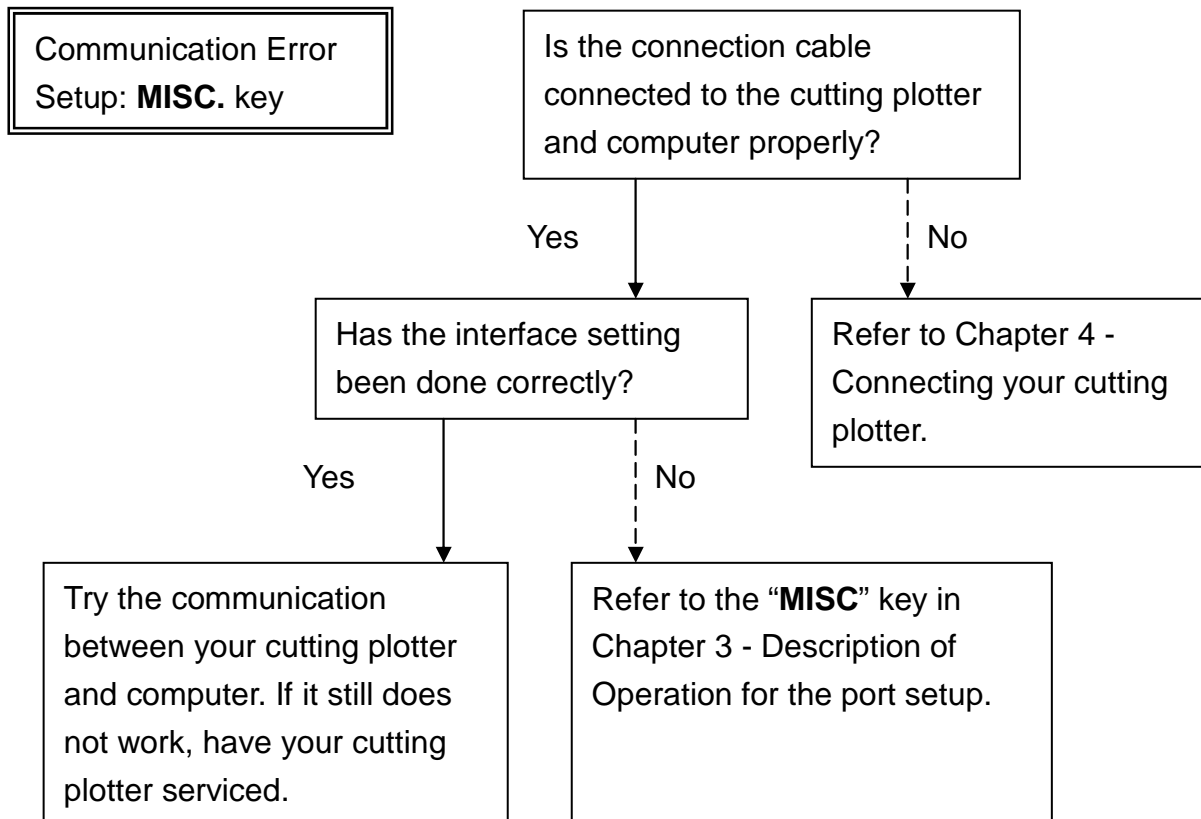
This message indicates that the blade up/down sensor malfunction. Re-power on to re-boot system. If the problem still exists, find a serviceman.

**Graph Was Clipped.
Data In Buffer**

This message indicates that the cutting exceeds the cutting limit. Reload larger media or re-scale the plot to a smaller size; then press the key followed by the display of LCM to continue.

6.3 Cutting Plotter/Computer Communication Problems

The messages showed below present problems in relation to cutting plotter/computer communication.

**Note:**

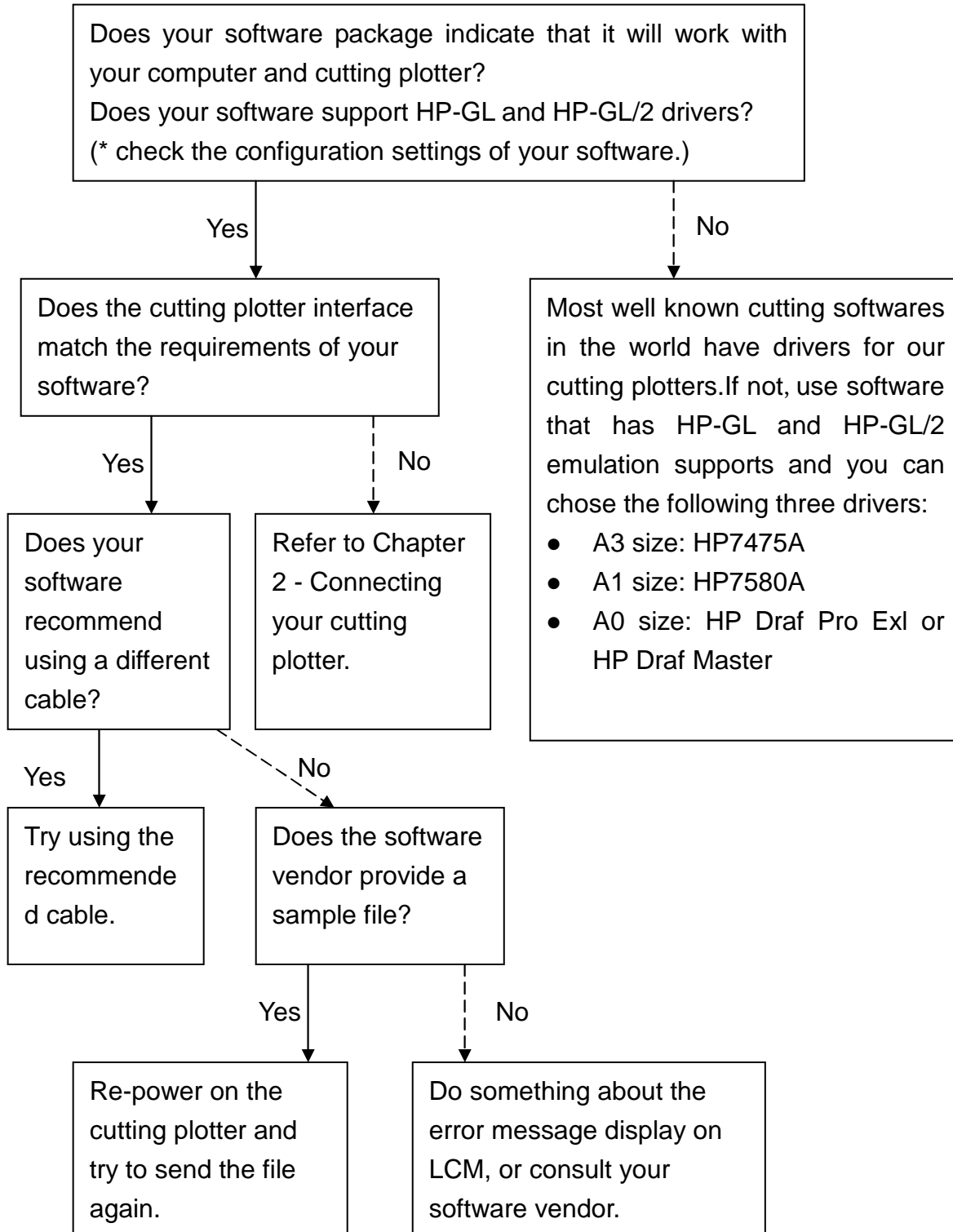
The computer also needs to set up compatible communication parameters to the cutting plotter set up.

HP-GL/2 Cmd. Error

If your cutting plotter can not recognize the HP-GL/2 or HP-GL commands, please check the HP-GL/2 or HP-GL commands applied to your cutting plotter are used properly.

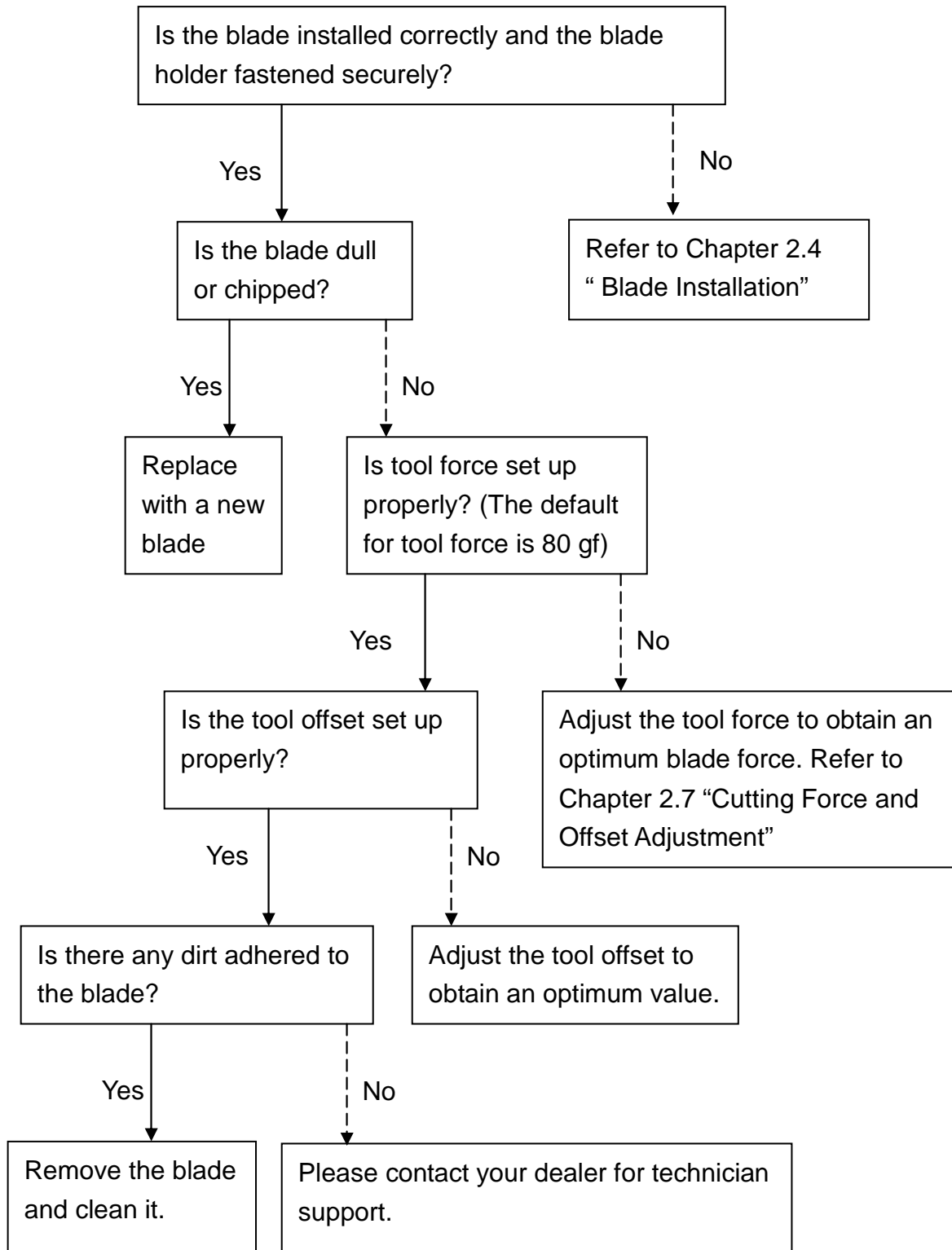
6.4 Software Problems

Check the following first:



6.5 Cutting Quality Problems

Note: The daily maintenance of your cutting plotter is very important. Be sure to clean up the grid drum and pinch rollers regularly for better cutting accuracy and output quality.



Jaguar II Specification

Model: Jaguar II		JII-61	JII-101S	JII-132S
Operational Method		Roller-Type		
Max. Cutting Width		610mm (24in)	1016mm (40in)	1320mm (52in)
Max. Media Loading Width		770mm (30.3in)	1270mm(50in)	1594mm(62.7in)
Number of Pinch Rollers		3	4	
Min. Media Loading Width		50mm		
Acceptable Material Thickness		0.8mm (0.03in)		
Drive Motor		DC Servo Control		
Cutting Force		0~600 g		
Max. Cutting Speed		1530 mm/sec (60ips / Diagonal)		
Media Basket		Optional		
Acceleration		4.2 G (gravity)		
Offset		0~1.0 mm (with an increase of 0.025mm)		
Mechanical Resolution		0.006mm		
Software Resolution		0.025 mm		
Distance Accuracy		±0.254 mm or ±0.1% of move, whichever is greater		
Repeatability		±0.1mm		
Memory Buffer		4 MB		
Interfaces		USB 2.0 (Full Speed) and Serial (RS-232C)		
Type of Command		HP-GL, HP-GL/2		
Tangential- emulation		Yes		
Configurable Origin		Yes		
Curve & Arc Smoothing		Yes		
Test Cut capability		Yes		
Repeat		Yes		
Copy		Yes		
Pouncing		Yes		
Control Panel		LCD (20 digits x 2 lines), 14 Keys, 1 Power LED		
Dimension (HxWxD) mm		414 * 930 * 490	1166 * 1430 * 667	1166 * 1754 * 667
(HxWxD) in		16.3 * 36.6 * 19.2	45.9 * 56.0 * 26.3	45.9 * 69.1 * 26.3
Net Weight		37.2 kg	53.3 kg	61 kg
Power Supply		AC 100-240V, 50~60 Hz (auto switching)		
Power Consumption		Max. 110watts		
Operation	Temperature	15°C~30°C / 60°F~86°F		
Environment	Humidity	25% ~ 75%		

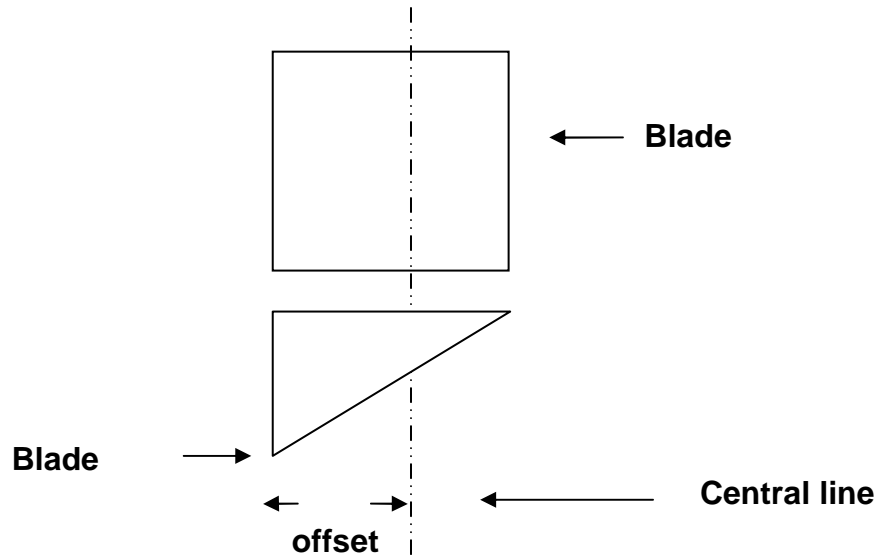
- Compatible with Windows 2000/ XP/ Vista/ 7/ 8 and MAC OS X 10.4-10.7.
- The specification and data sheet may vary with different materials used. In order to obtain the best output quality, please maintain the machine regularly and properly.
- GCC reserves the right to change the specifications at any time without notice.
- The above listed specification values are effective only when operated with media certified by GCC.

Blade Specification

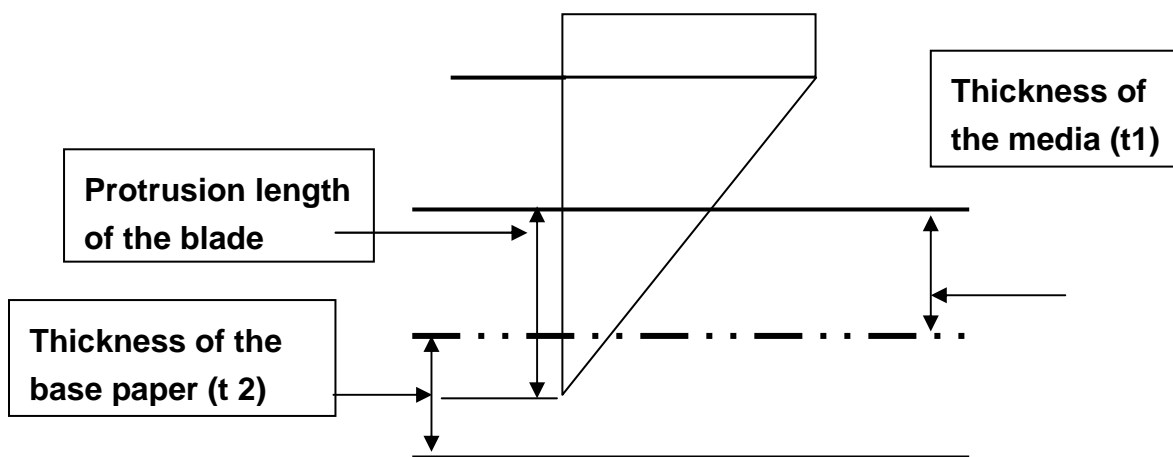
About the Tool

A generic term referring to the blade that cuts the sheet, the pen that does plotting, and the LED bombsight (option) used for pointing to the reference point.






OFFSET is the distance that the blade tip is displaced from the centerline of the blade.



Protrusion Length of the Blade



Length of protrusion = $t_1 + t_2 / 2$, but for your convenience you may just make it about 0.3mm ~ 0.5mm beyond the blade holder tip.

20200159G	For cutting thick fluorescent and reflective vinyl. Also for cutting detailed work in standard vinyl.
	The blade is 45° with Red Cap (5-unit package), 0.25 mm offset
	
265012020G	For cutting reflective vinyl, cardboard, sandblast, flock, and stencil sharp edge.
	The blade is 60° with Green Cap , 0.50 mm blade offset
	
26500059G	For cutting thin sandblast mask and stencil with friction feed or sprocket feed machine.
	The blade is 60° with Blue Cap , 0.25 mm blade offset
	
26500060G	For Cutting small text and fine detail. Sharp blade with smallest offset.
	The blade is 0.175 mm blade offset with Black Cap
	
265012840G	For thin and delicate media such as window tint.
	The blade is 25° with Yellow Cap , 0.25 mm blade offset
	

DirectCut Instruction

DirectCut Mac AI Plug-in is compatible with MAC OS X 10.4-10.7 (operated with Adobe Illustrator CS2-CS5).

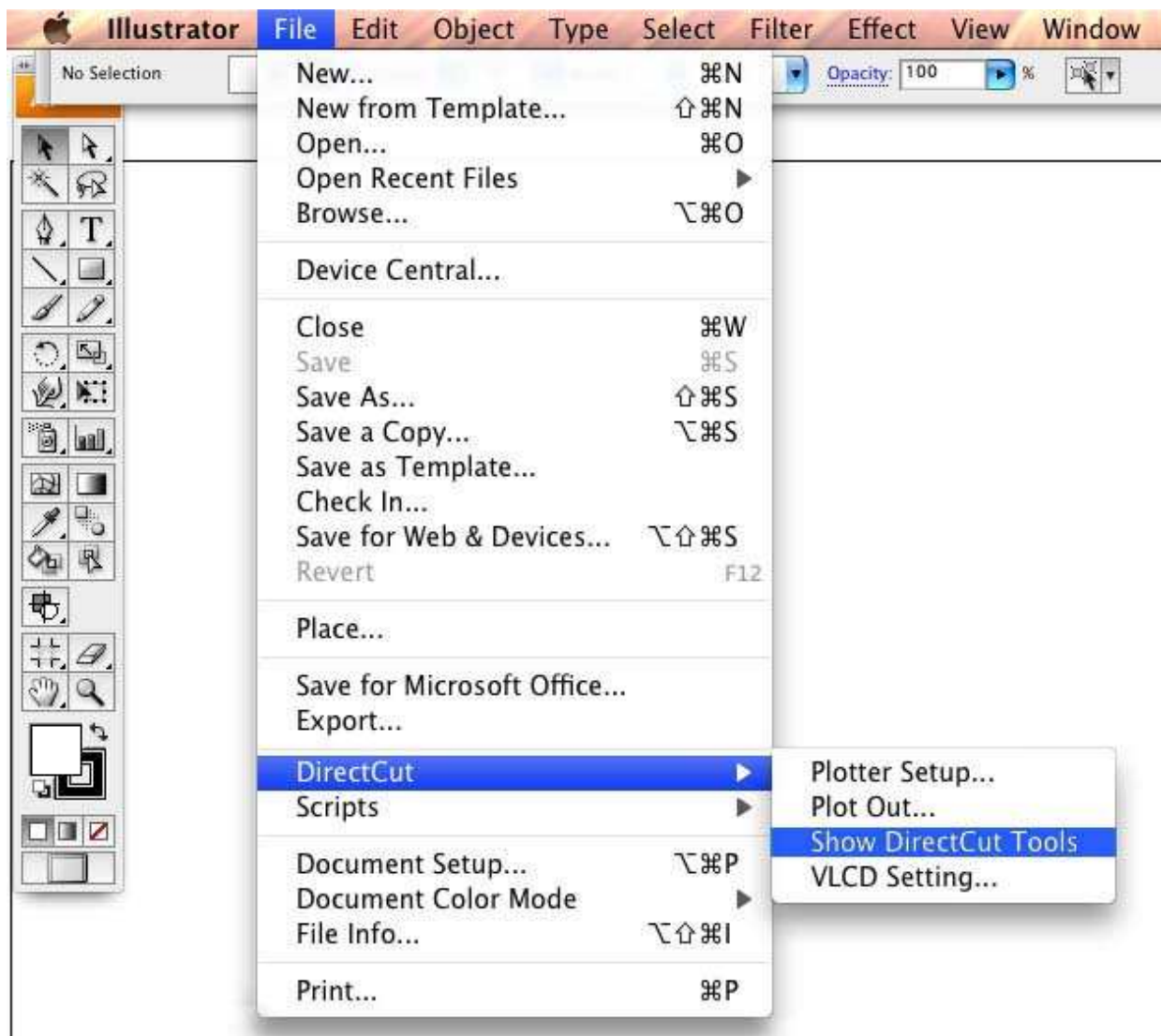
If you want to use Adobe Illustrator CS6 on your MAC, you may need Parallels Desktop software, Window OS and Windows based Adobe Illustrator CS6 to install Windows OS in your MAC computer and run Windows based software under MAC computer.

User Instructions

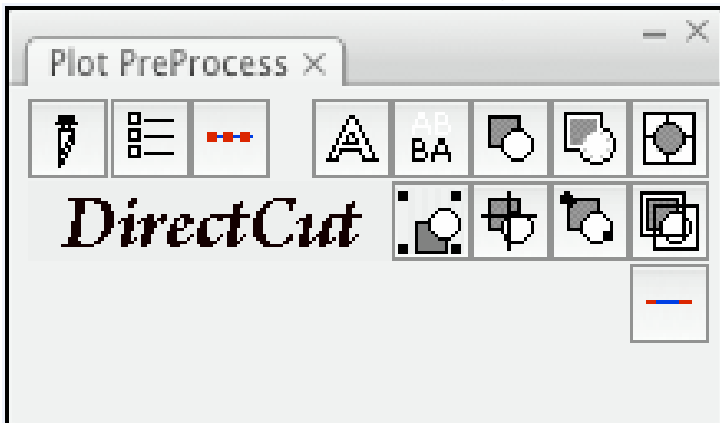
Follow the simple steps below to complete your output settings:

Step 1. Run DirectCut

1) Go to File and select “Show DirectCut Tools” under “DirectCut”



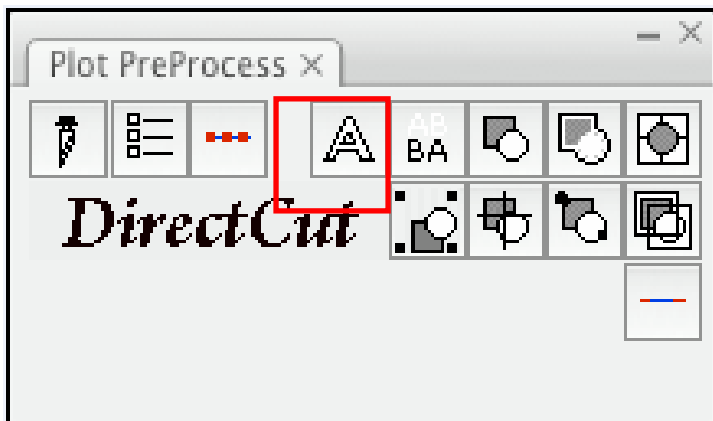
You will be presented with this dialog below:



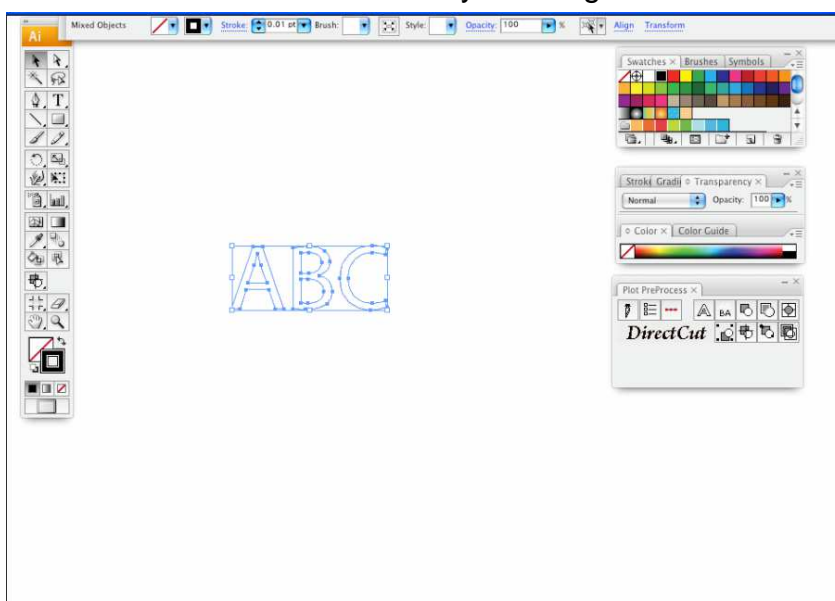
Step 2. Create/ import your image/ file.

For texts

1) Enter your texts in Adobe Illustrator, select the letters and click [Text outline] to outline the letters.



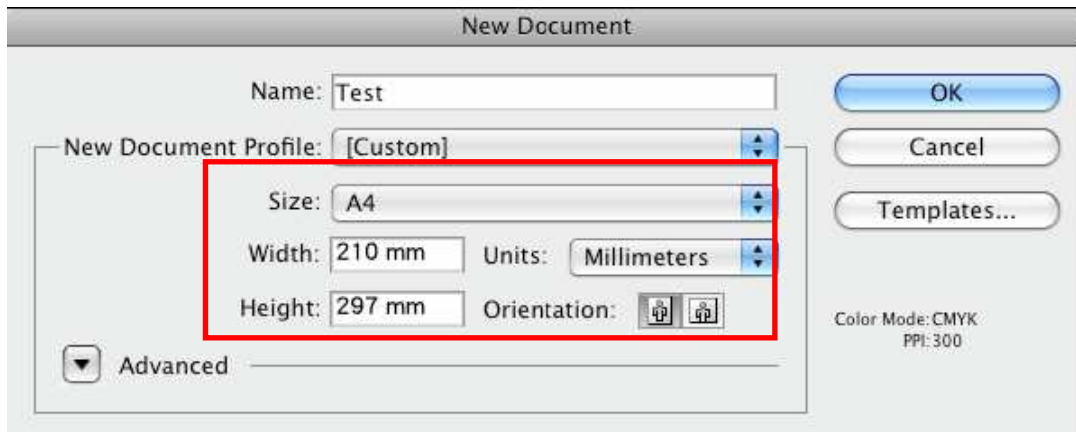
A contour line will be created for your image.



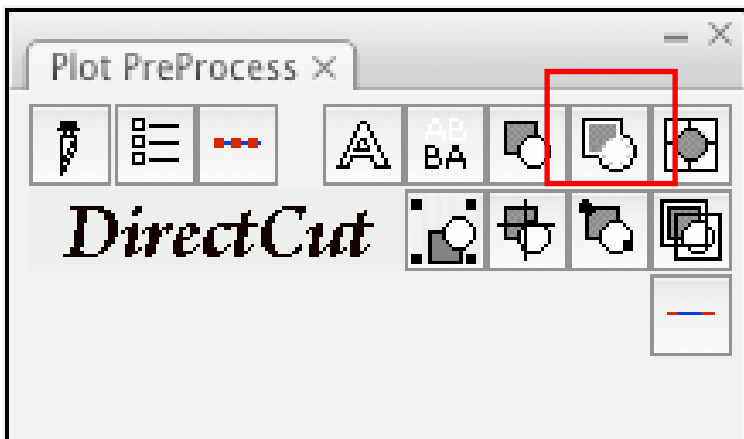
Note: The line width must be set as 0.001 mm

For Images

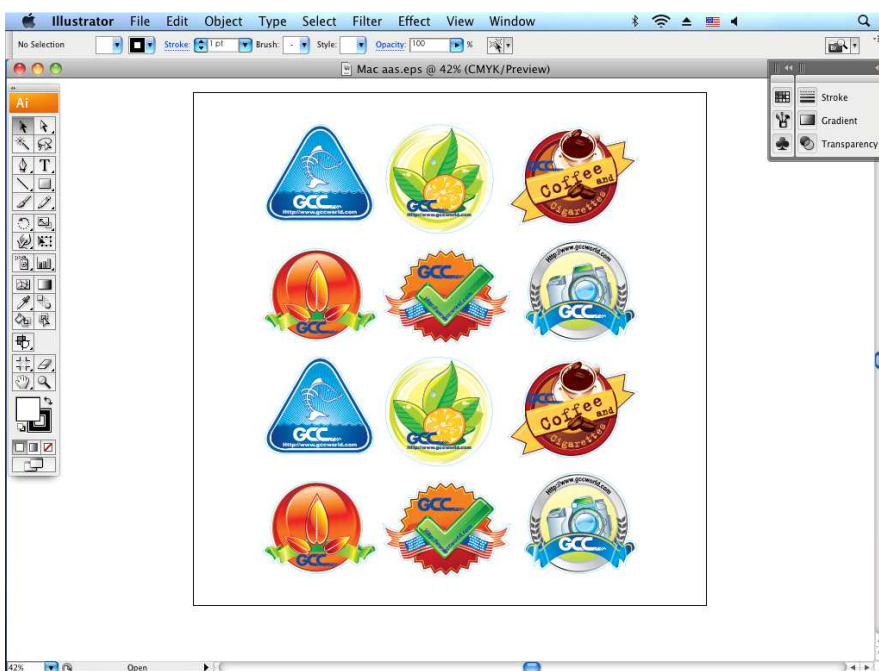
- 1) Open a new image on Illustrator and decide the size of your material.



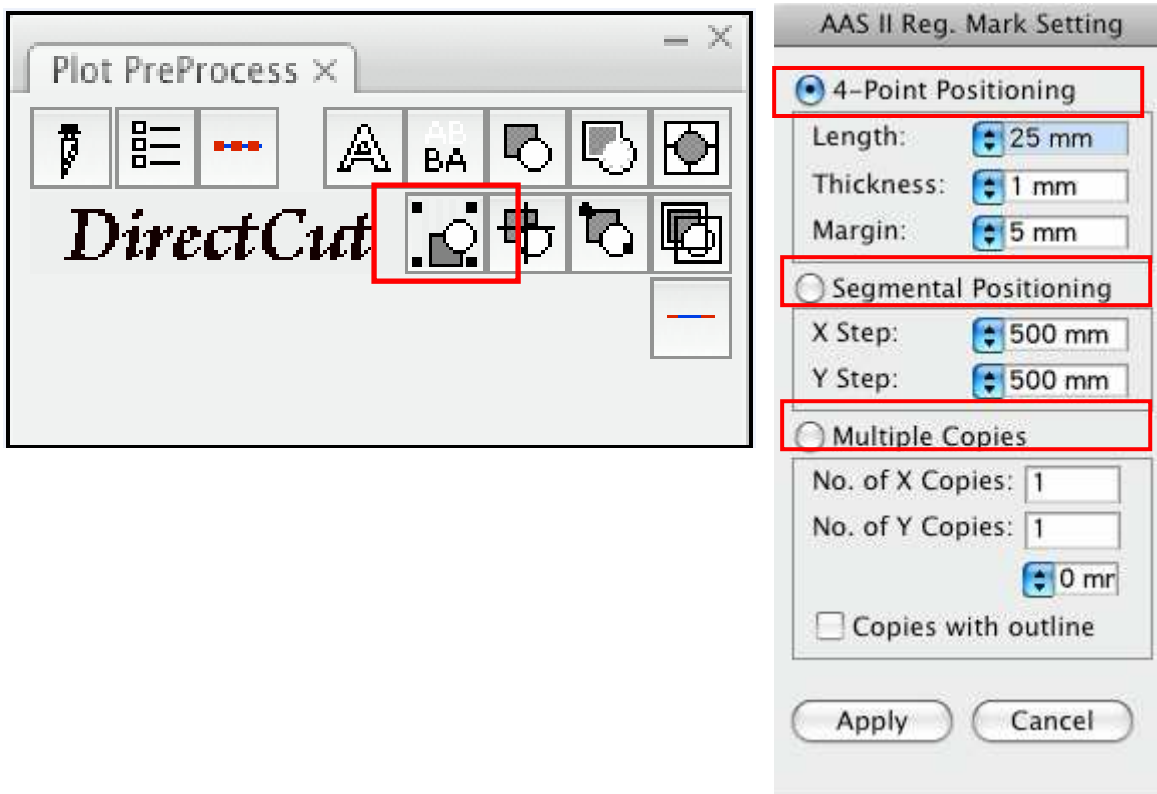
- 2) Select the image and click [Make outline and offset] to create outlines of graphics.



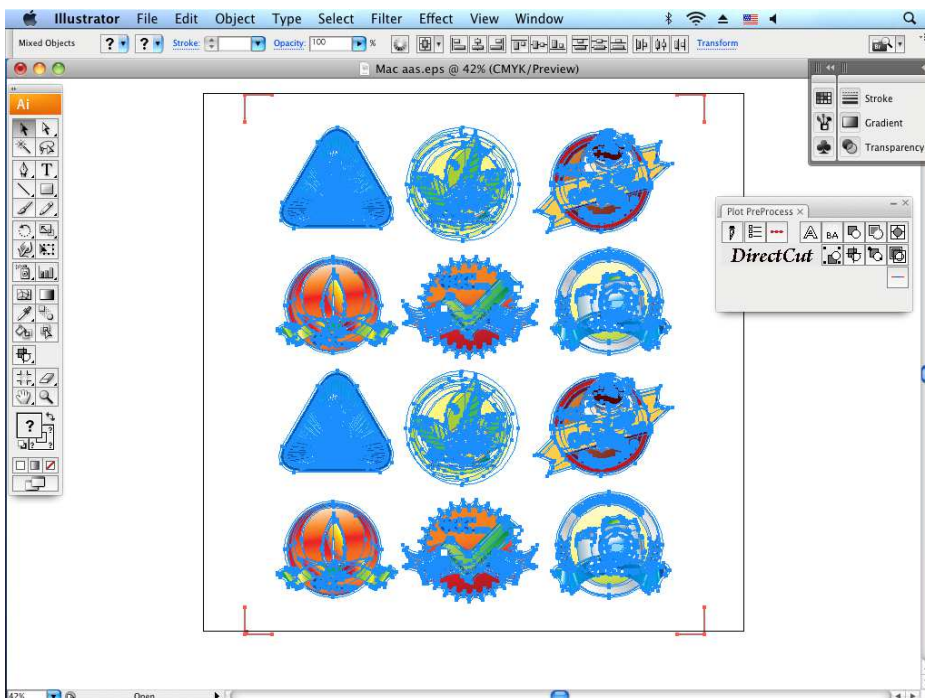
Outlines will be created for your image.



3) Click on the image and apply the AAS function by clicking the [Add registration marks] command and select the registration marks needed.

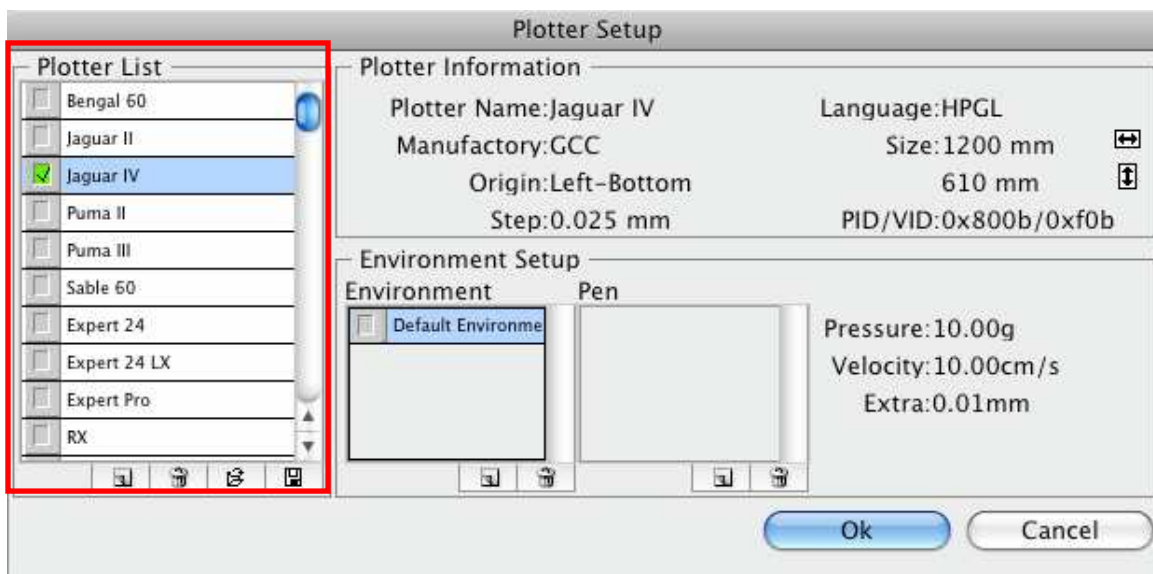
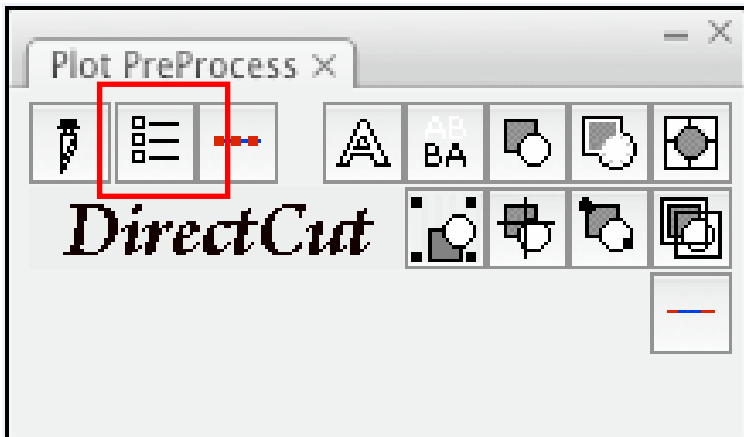


The registration marks will be created as below.

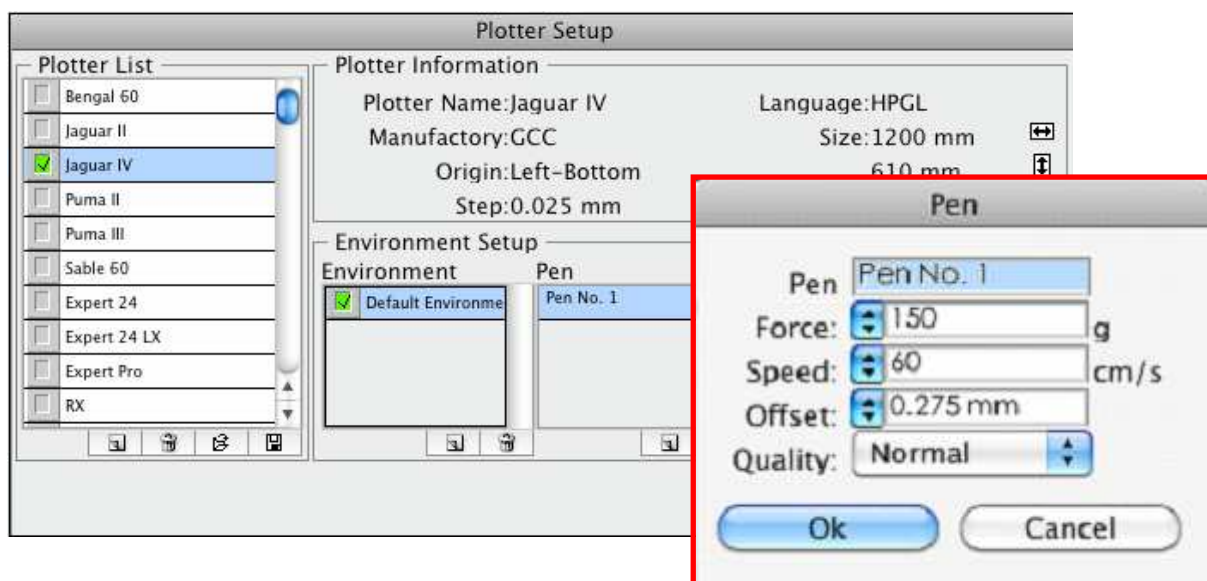


Step 3. Output

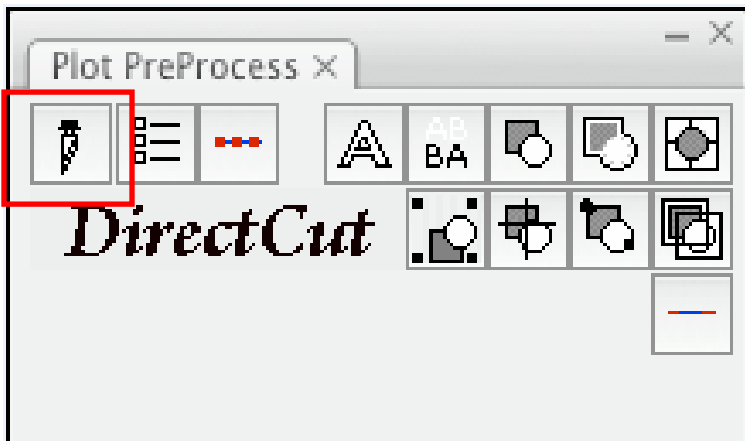
1) Click on [Plotter Setup] and select the correct model in [Plotter List].



2) Tick Default Environment to create Pen No.1 in the Pen section. Double click Pen No.1 and complete your parameter settings.



3) Select the entire object and click [Plotter Output].



4) Output the object by clicking [Export] and GCC Cutting Plotter will start cutting the image.

