

# AFR-24S User Manual



<http://www.GCCworld.com>

**NOTICE**

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| A-5 | Illustrator Plug-In   |
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## Safety Measures

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Before you start installation, please read below information carefully to avoid potentially hazardous situations.

### **General safety**

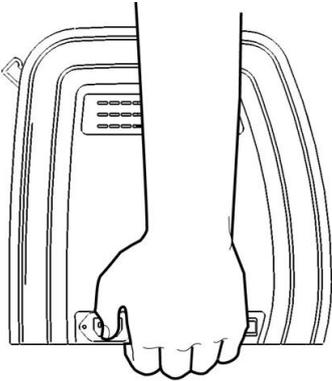
- Use the voltage of the power source is identical to the voltage of the machine to prevent any damage or failure.
- Make sure that the plug is fully inserted in the power outlet. Do not use outlet that is loose.
- Do not touch the machine during a lightning storm.
- Do not overload the power cord.
- Do not place heavy objects on, or damage the power cord or plug.
- Do not forcibly bend or pull the power cord.
- Do not allow the machine / AC adapter / power plug to get wet, for example, by handling them with wet hands or spilling beverages onto them.
- Disconnect the AC adapter and stop using the device if you notice abnormal odor, heat, discoloration, deformation or anything unusual while using it.

### **Operating precaution**

- Avoid environments where the machine is exposed to high levels of dust, temperature (temperature exceeding 30°C or 85°F) or humidity (humidity exceeding 75% or where the ambient temperature is near the dew point).
- Keep the working area stable and avoid sever vibration.
- Do not use or store the product is exposed to direct sunlight, water or oil splashes, salty air or saltwater, dust or humidity, flammable gas and strong air current.
- Select a location that is large enough to accommodate the machine.
- Do not touch the paper sheets and moving parts of this machine during operation. Also be careful to make sure that clothing and hair do not get caught.
- Do not apply force or object weights on the moving arm.
- Be sure to grasp the plug, not the cable, when disconnecting the power supply from an electric form an electric socket.

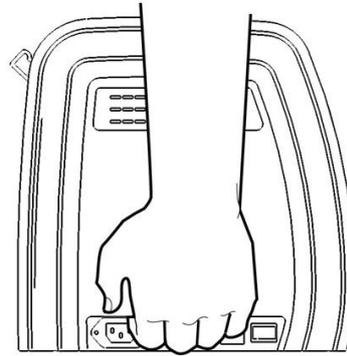
**【Important Information】**

- 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)

Hold from the bottom



X (Incorrect)

Hold the depression area

- 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.

**【Note】**

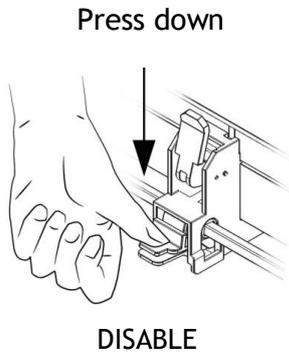
The following situations will automatically turn on the buzzer alarm and rings for 3 seconds:

1. Fail to load the media into cutter for three consecutive loading.
2. Paper jam after sizing
3. Paper feed errors when running out paper
4. Motor crashed
5. Fail to detect the registration mark

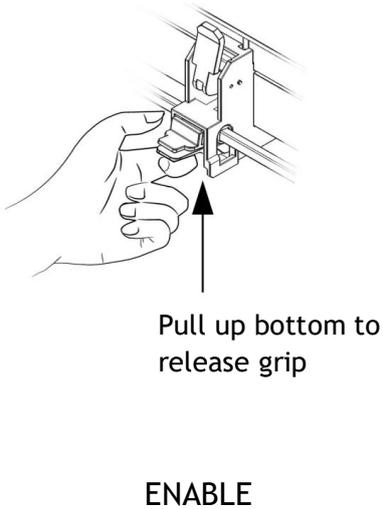
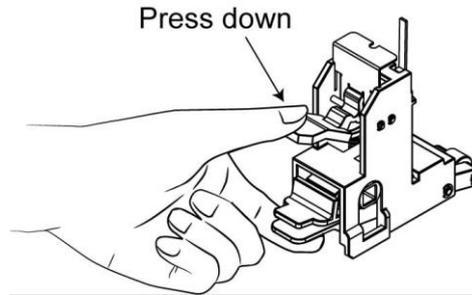
**Warning**

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

**O (CORRECT)**



**X (INCORRECT)**



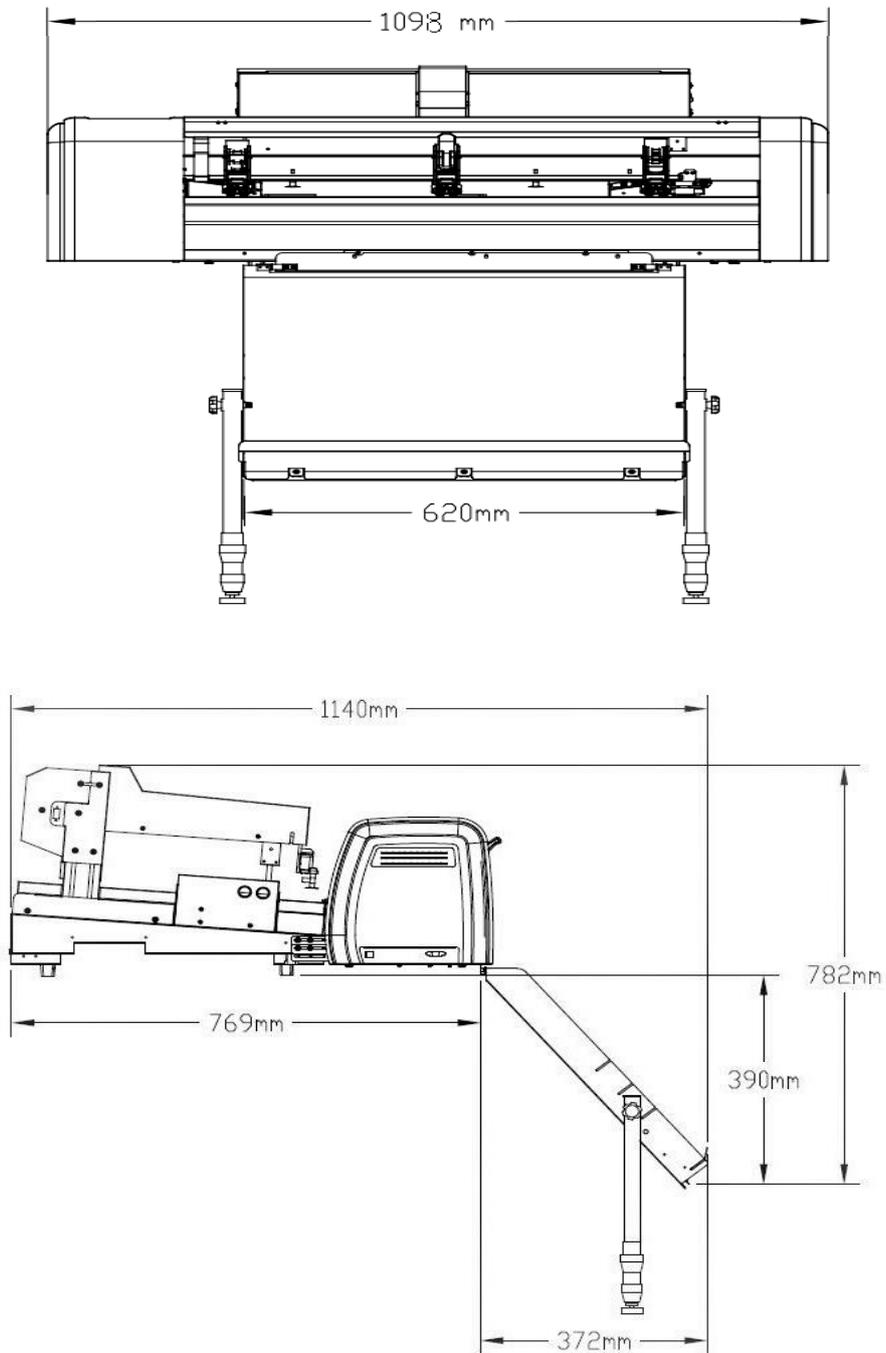
**Note:**

In case the grips clipped together due to the wrong operation, please use a pair of 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.

## Necessary work space

Prepare a working table that accommodates your RXII-61 with auto feeder. The required working table should be larger than 1,100 mm in width, 800 mm in length and 600 mm in height.

Prepare three outlets for your RXII, auto feeder and your computer.



# Chapter 1 General Information

## 1.1 Introduction

In combination of a cutter and an auto sheet feeder, AFR-24S provides the advantage of creasing function with dual tool holder up to 600gsm cutting force and 1,530 mm/s cutting speed in the digital sheet feed solution that can crease and cut at one time sheet by sheet instead of manually operation to optimized process with versatility capability for short run production that simplifies your operation through automatic working procedure and create maximum profit in sampling, folding carton packaging, customization cards, labels and stickers.

## 1.2 Package Items

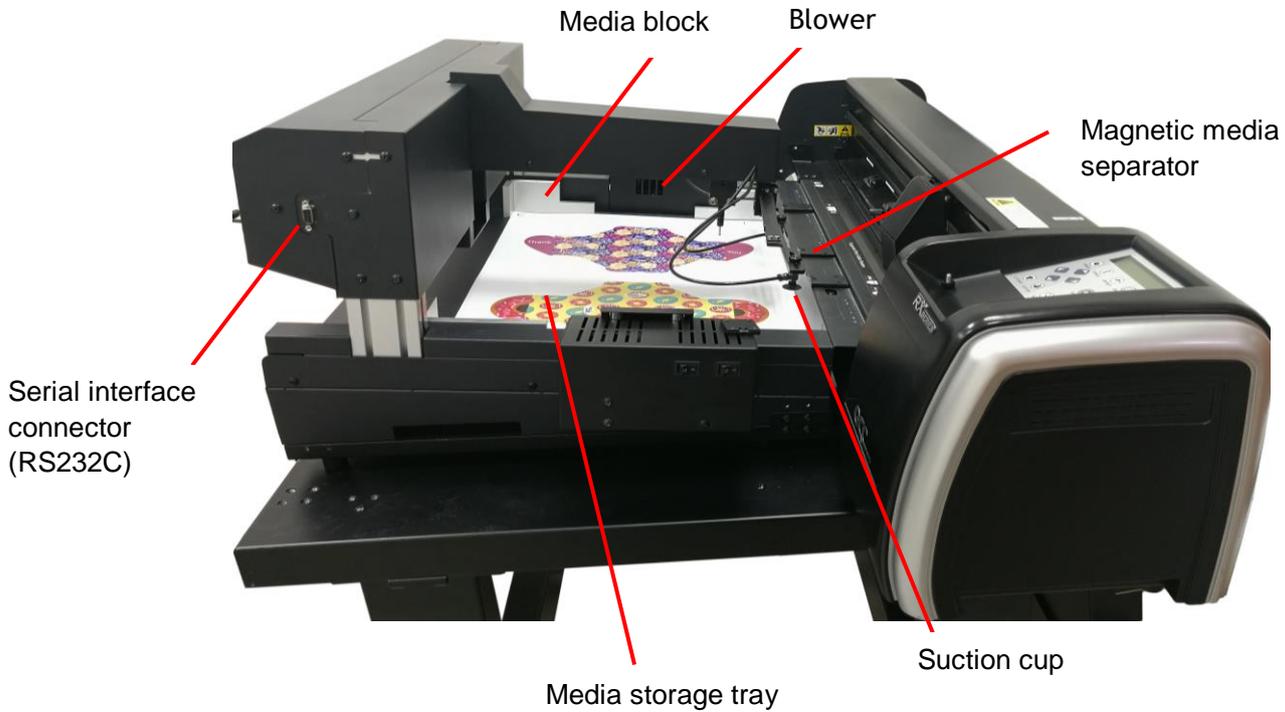
The package of the cutter and Auto Feeder content the items listed below, please check carefully. If you find any item missing, please consult your local dealer for further assistance.

| Machine Standard Item  | Quantity      |
|--|---------------|
| <b>1. Cutting Plotter</b>  | <b>1 unit</b> |
| <b>2. Flexible Media Support System Package</b><br>2 x Roll Media Flange<br>2 x Roll Holder<br>4 x Roll Holder Guide Bushes<br>2 x Roll Holder Support<br>1 x M6 L-shape hexagon screw driver<br>1 x Installation Guide for Roll Holder<br>1 x M5 L-shape hexagon screw driver<br>2 x Desktop Support Brackets<br>4 x Plastic Foot<br>4 x M4 screws<br>12 x M6 screws<br>1 x M4 L-shape hexagon screw driver | <b>1 set</b>  |
| <b>3. Accessories</b><br>1 x AC power Cord<br>1 x User's Compact Disk<br>1 x data cable (USB cable: 3m)<br>1 x Blade Holder Assembly (Installed in tool carriage of the cutting plotter)<br>1 x Blade (Installed in Blade Holder)<br>1 x Safe Blade<br>1 x Cutting Pad for Vinyl cutting<br>1 x Tweezers<br>1 x Promise Card   | <b>1 set</b>  |

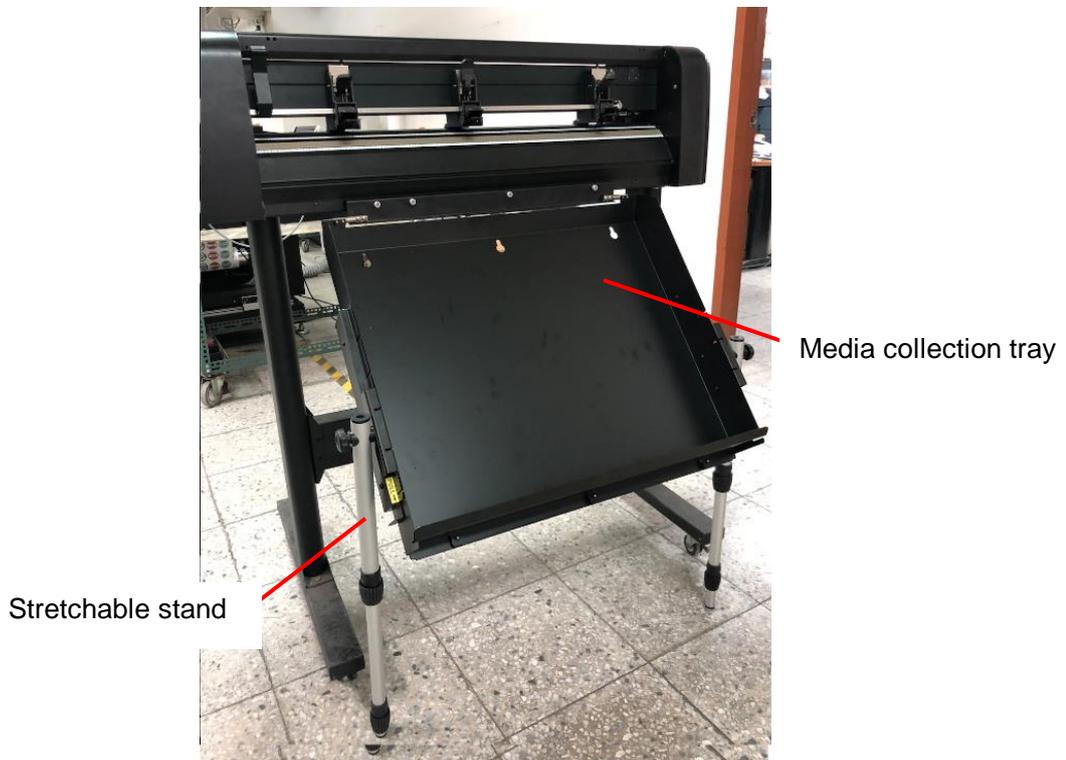
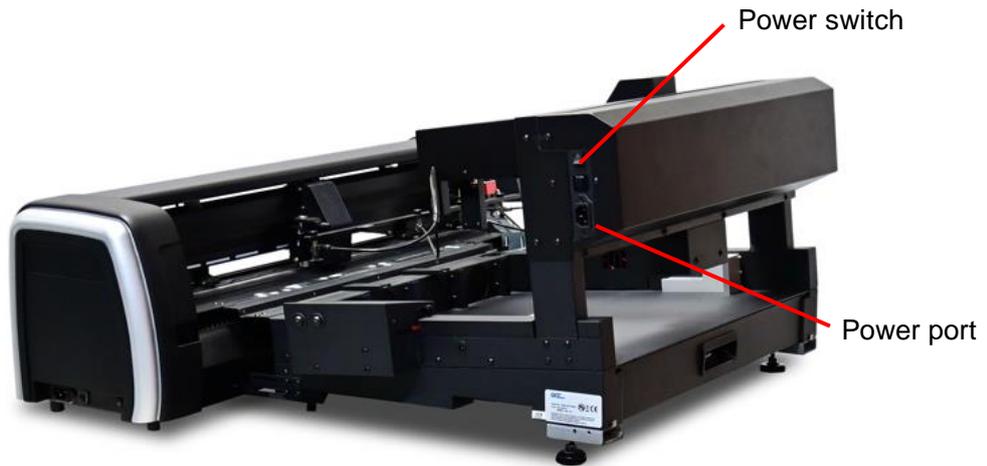
| Item                            | Q'ty   | Photo   |
|---------------------------------|--------|---|
| Auto Feeder                     | 1 unit |     |
| <b>Auto Feeder Accessories</b>  |        |   |
| Media collection tray           | 1 set  |     |
| Left & Right connecting bracket | 2 pcs  |     |
| Thumb screw                     | 2 pcs  |   |
| Screw                           | 4 pcs  |  |
| Power cable                     | 1 pc   |  |
| RS232 cable                     | 1 pc   |   |
| Installation guide              | 1 copy |  |
| Media blocks                    | 2 pcs  |   |

## 1.3 Machine overview

### 1.3.1 Auto Feeder overview

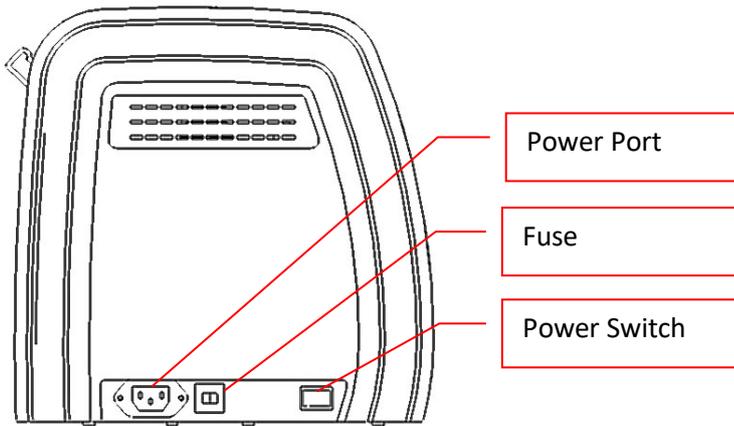


| Item                                | Function  |
|-------------------------------------|---|
| Serial Interface Connector (RS232C) | Used to connect a feeder to a cutter through a serial interface (RS232) cable     |
| Media block                         | Adjust the media to a proper position.  |
| Media storage tray                  | Stack the media for later use.  |
| Blower                              | Blow air to separate the media and avoid double feeding.                          |
| Magnetic Media separator            | Separate the media to avoid double feeding while loading sheet media to a cutter. |
| Suction cup                         | Hold the media to load the media sheet to a cutter.                               |

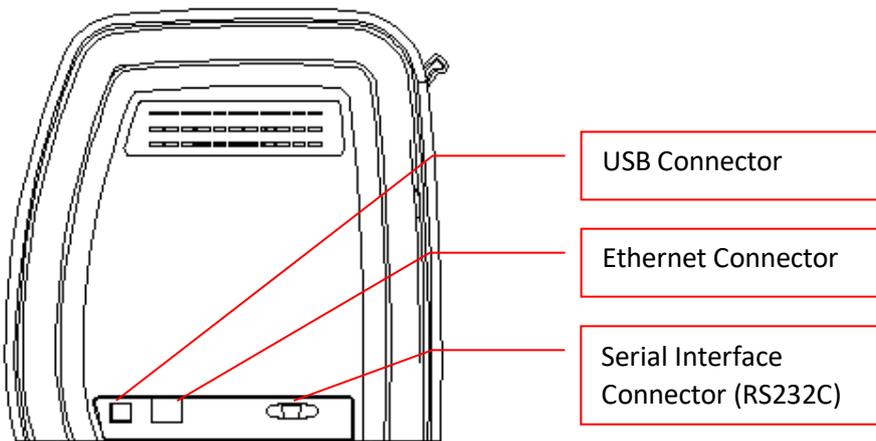


| Item                             | Function  |
|----------------------------------|---|
| Power port                       | A socket for power cable.   |
| Power switch                     | Switch the Auto feeder on and off.  |
| Adjustable media collection tray | Collect the cut media after completing the job                            |
| Stretchable stand                | Extend the stand to reach the ground to support the media collection tray |

### 1.3.2 Cutter overview



| Item         | Function                            |
|--------------|-------------------------------------|
| Power Switch | On when switches to [I]; Off to [O] |
| Fuse         | 3 Amp                               |
| Power Port   | A socket for AC power cable.        |



| Item                                | Function  |
|-------------------------------------|---|
| Serial Interface Connector (RS232C) | Used to connect the cutting plotter to a computer through a serial interface (RS232) cable. |
| Ethernet Connector                  | Used to connect your cutting plotter to a local area network                                |
| USB Connector                       | Used to connect the cutting plotter to a computer through a USB cable                       |

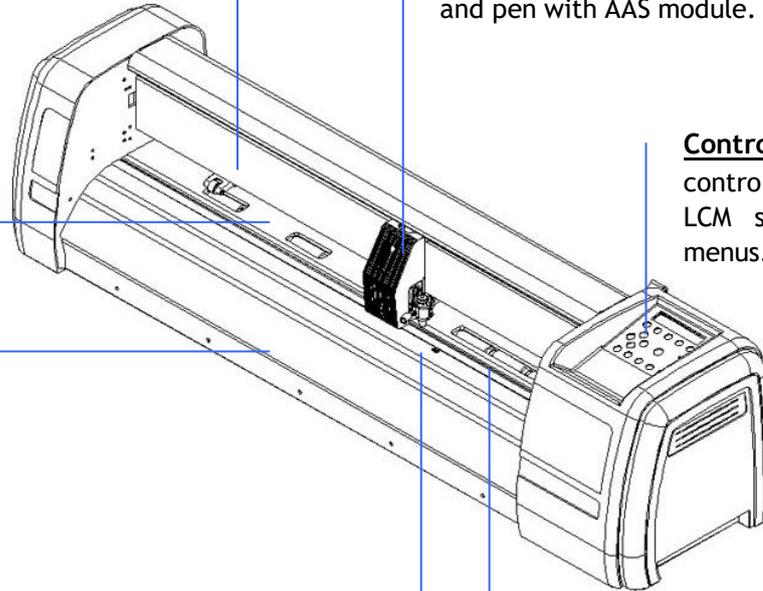
### 1.3.3 Appearance of Cutter

**Grid Drums** - move the media back and forth during operation.

**Tool Carriage** - performs the cutting with the installed blade and pen with AAS module.

**Platen** - provides the surface for holding and supporting media while performing cutting.

**Control panel** - consists of 14 control keys and 1 LED and 1 LCM showing messages and menus.

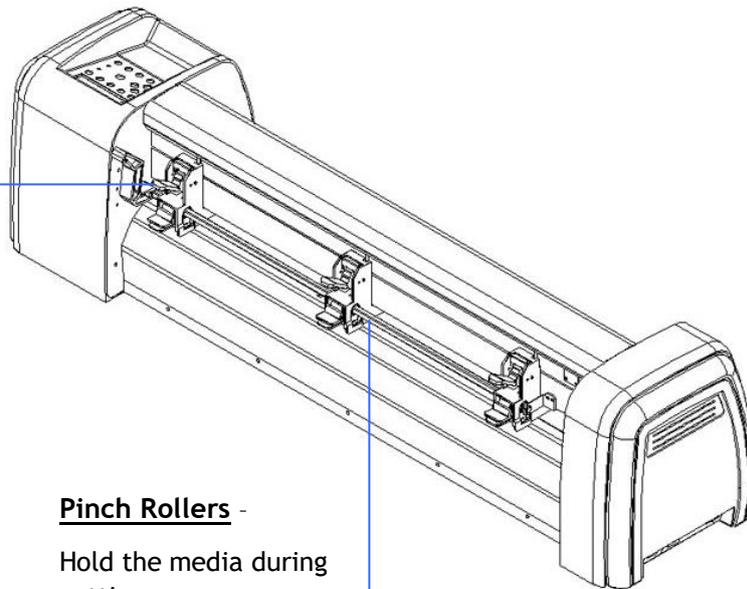


**Slicer Groove** - slice off the extra media easily along this groove.

**Alignment Rulers** - media can be aligned with the clear guide line marks.

**Cutting Pad** - provides the protection of blade when the blade is cutting.

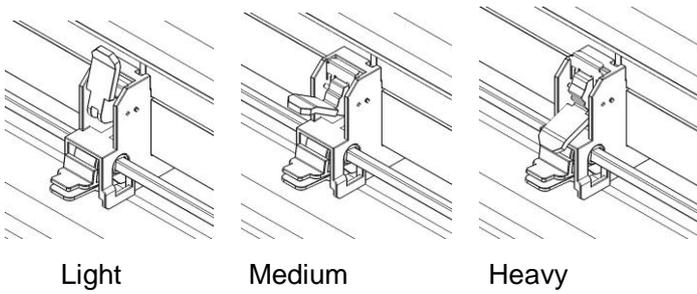
**Lever** - Raise or lower the pinch rollers.



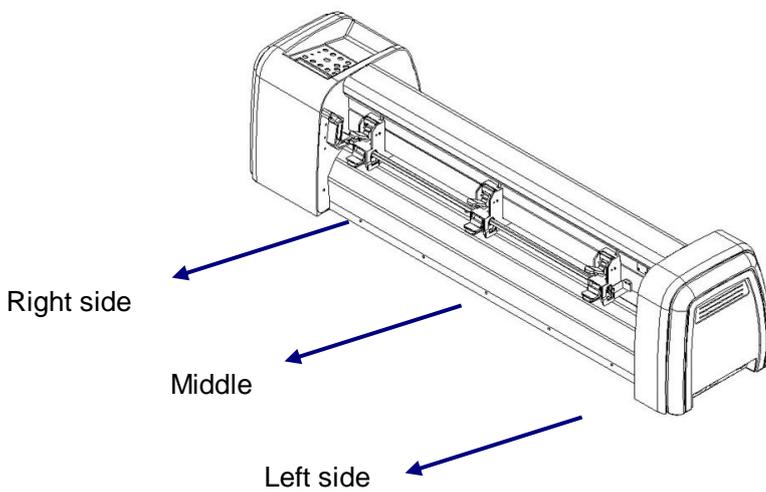
**Pinch Rollers** - Hold the media during cutting.

### 1.3.4 Pinch roller

The Multi-Pressure Pinch Rollers give users three pressure settings to better cater to the different types of media that they are working with, for example, set light hold-down pressure of the pinch roller in the middle when cutting thin materials such as window tinting film.



Please note that the pressure of the pinch rollers on the left and right sides should always be the same or heavier than the pinch rollers in the middle. The pressure of the pinch rollers on the left and right sides should be set to the same pressure setting. You can use the following combinations of the pinch rollers.



| Left side | Middle | Right side |
|-----------|--------|------------|
| Heavy     | Medium | Heavy      |
| Medium    | Medium | Medium     |
| Medium    | Light  | Medium     |

## Chapter 2 Installation

The following instruction will lead you how to install and operate in the regular plotter (RXII-61 Creasing) and AFR separately.

### 2.1 Connecting your GCC cutter

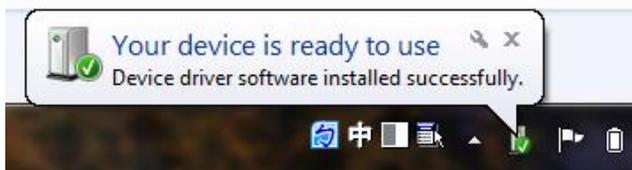
The cutting plotter communicates with a computer through a USB (Universal Serial Bus), a Serial port (RS-232C) or Ethernet. The following section shows you how to connect the cutting plotter to a host computer and how to set up the computer/cutting plotter interconnection.

#### Note:

1. When USB connection is enabled, serial port will be disabled automatically.

#### 2.1.1 USB Connection

1. Turn on the machine.
2. Connect the USB connector to the machine and then USB driver will be 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



##### 2.1.1.1 Driver Installation

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

#### Caution!!

- ✓ If you are using Windows 7 and above as your operating system, make sure you log in using the "Administrator" account.

**Step 1** Visit GCC website and go to “SUPPORT” page to download the user manual, driver and software (<https://www.gccworldnew.com/download.php>).



**Step 2** You may use search function or directly click the product category to choose the model you want.



## Download Area



### Or browse by machine model





DFS



LabelExpress



DecalExpress



DecalExpress-ECO



AFJ-24S



AFR-24S



JV-240UV

Download the driver according to the type of connection.

**Software** ▶

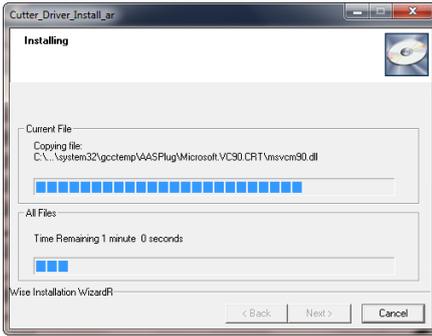
**Product Brochure** ▶

**Driver** ▾

| Title                      | Size   | Download                 |
|----------------------------|--------|--------------------------|
| Cutter COM Driver_V2.2f-03 | 11.2MB | <a href="#">Download</a> |
| Cutter ETH Driver_V2.2f-03 | 11.2MB | <a href="#">Download</a> |
| Cutter USB Driver_V2.2f-03 | 11.2MB | <a href="#">Download</a> |

**User Manual** ⬆

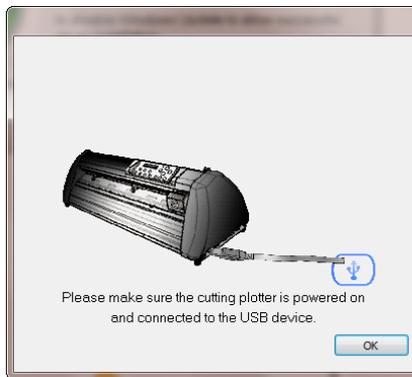
**Step 3** Unzip the file and double click the driver.exe to start installing the Driver and AAS plug-in.



**Step 4** If you were Windows 7 and above users, please click on the **red words** to instruct you how to disable Windows Update to allow success driver installation. And then click OK to next step.



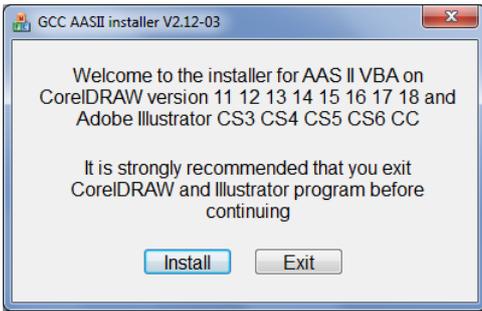
**Step 5** Please make sure the cutting plotter is powered on and connected to the USB device, and then click OK to next step.



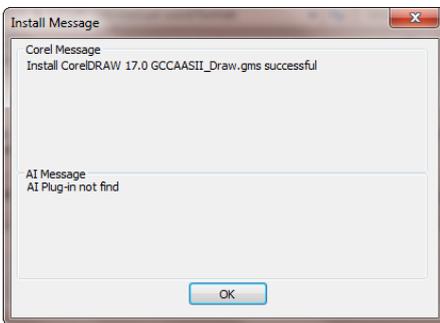
**Step 6** Confirm to close all running application programs before you start installing the driver, and then click OK.



**Step 8** If you want to install AASII VBA on CorelDRAW and Adobe Illusatrator, exit CorelDRAW and Adobe Illusatrator program, and then click on“Install.”



**Step 9** Check Install Message to confirm CorelDRAW and AI version and then click OK.

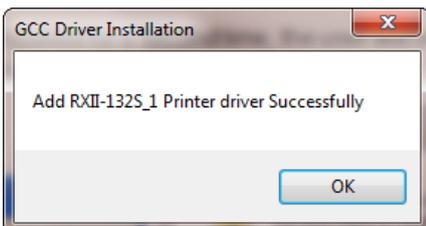


**Note:**

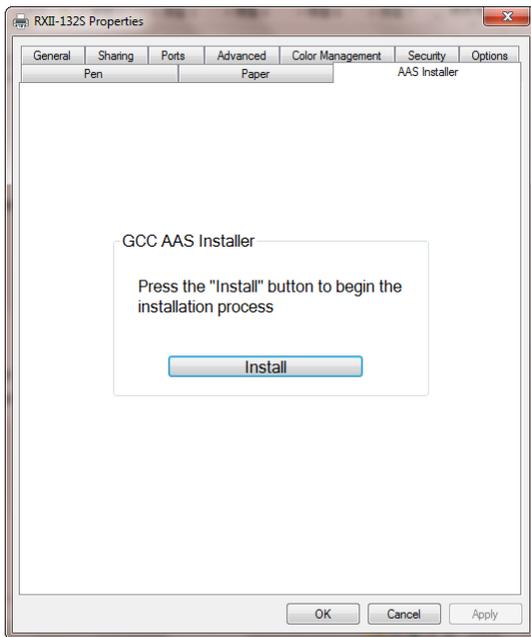
(1) If the driver is being installed for a second time, the user will be prompted as to whether a second copy of the driver installation is required.



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



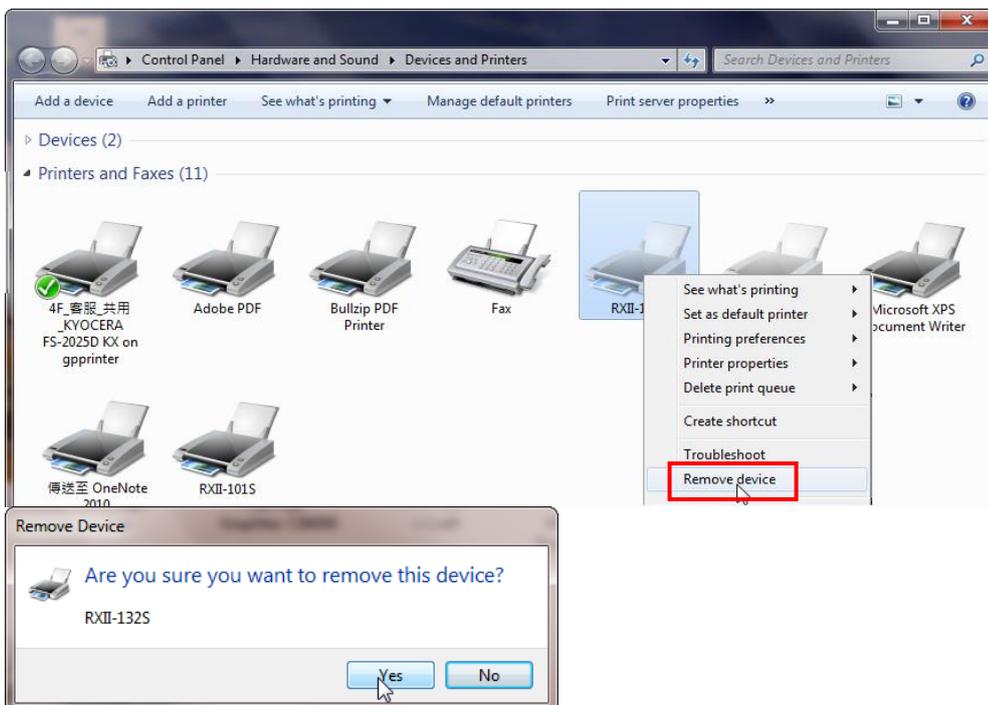
(3) For users who have upgraded Adobe Illustrator or CorelDRAW, please go to the **AAS Installer** page in the **Printer Properties** window and click **“Install”** to access the latest version of GCC AAS Plug-in.



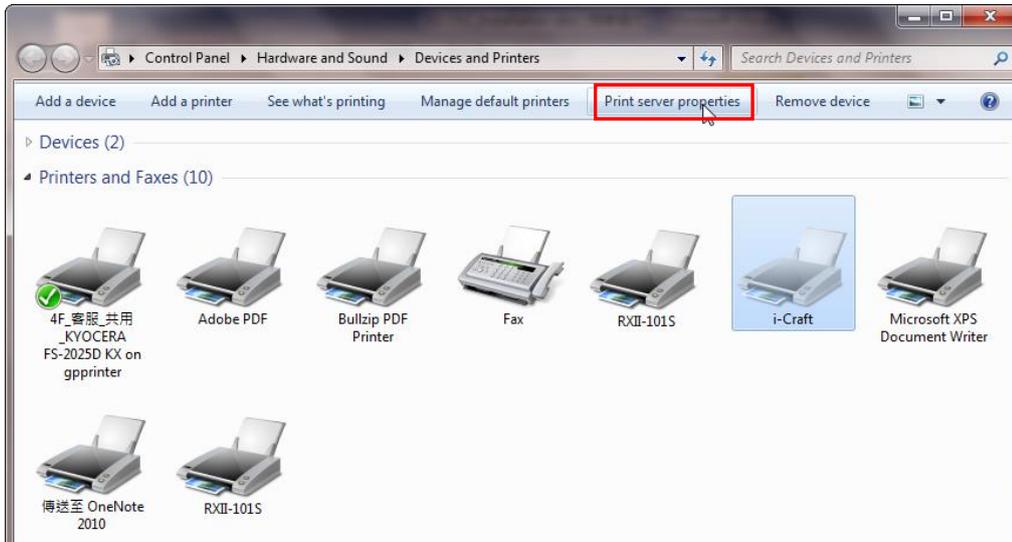
### 2.1.1.2 Driver Un-installation

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.

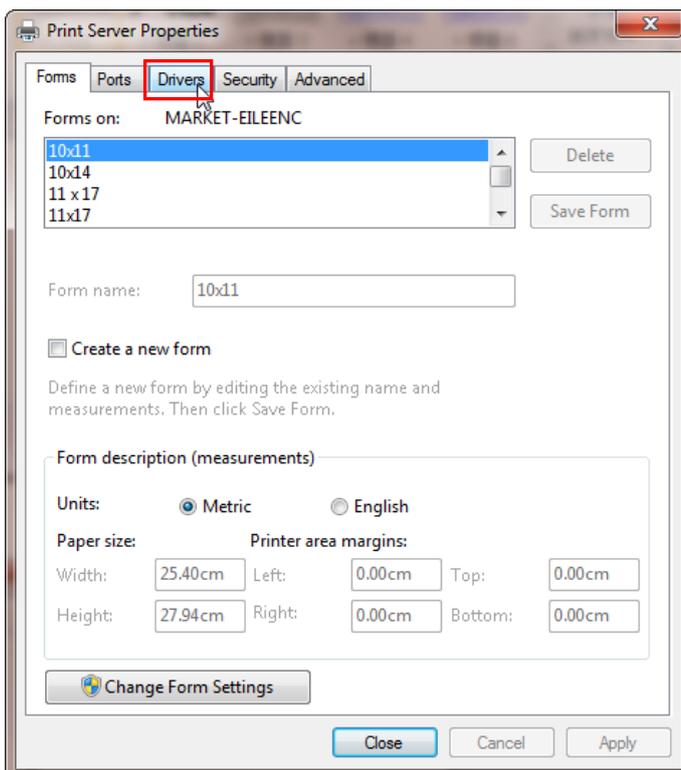
**Step 1** Go to Control Panel\Hardware and Sound\Devices and Printers window. Right click the printer and select **“Remove device.”**



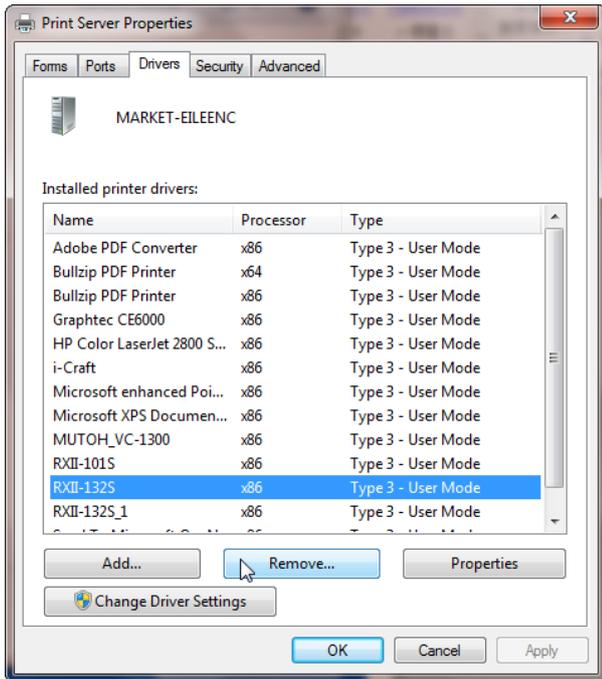
**Step 2** After removing the unit, click on any printer on the page and select **“Print server properties.”** (For Win 7 and above) or right click on blank space and then select **“Print server properties.”** (For Windows XP)



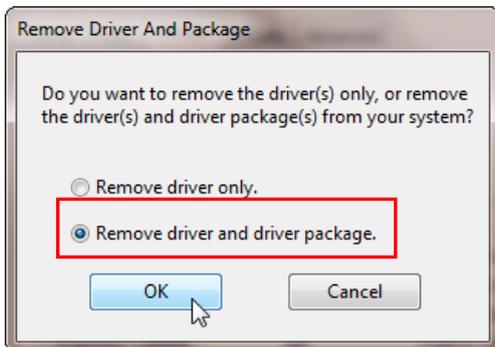
**Step 3** Select **“Driver”** page



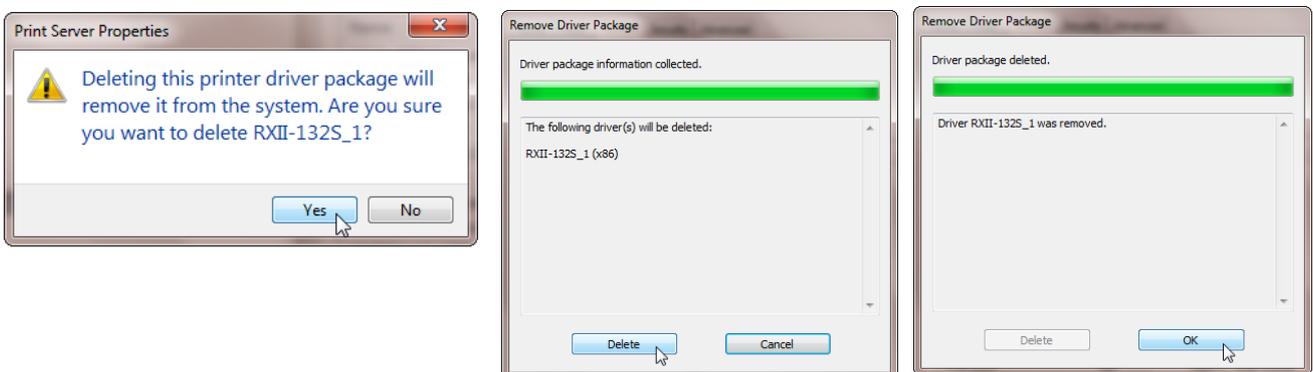
**Step 4** Select the model and click on “Remove”.



**Step 5** Select “Remove driver and driver package” and click OK.



**Step 6** Click “Yes” and then click “Delete” and “OK,” and the driver installed on PC is completely removed.



### 2.1.2 RS-232 Connection

■ 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.**

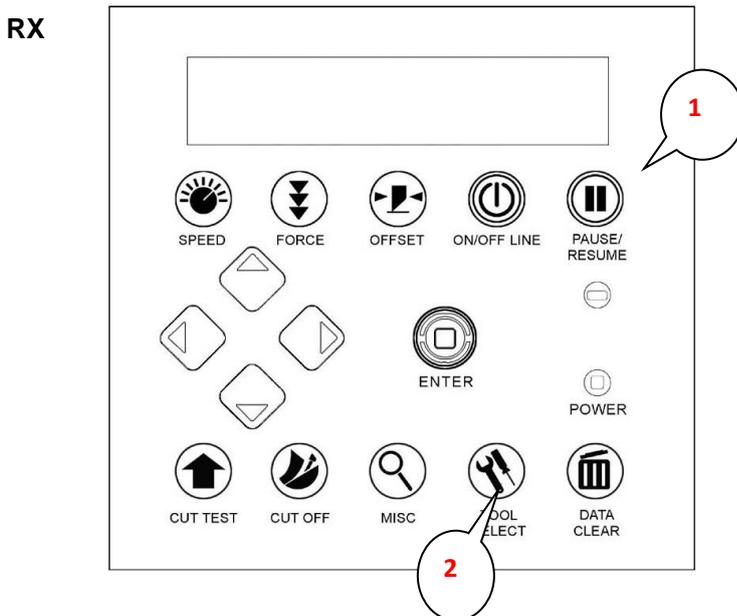
### 2.1.3 Ethernet Connection

#### A) Networking Connectivity Setup

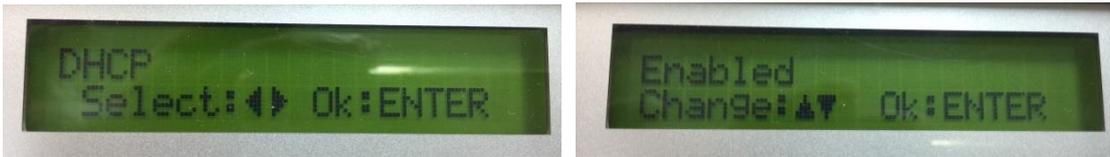
**Step 1** Connect the LAN port and Ethernet port on GCC cutting plotter with RJ45 Ethernet cable, and turn on the machine.



**Step 2** Press **On/Off line** and then **MISC** button on your control panel.



**Step 3** Go to the **DHCP** page and select **Enable** through the up and down arrow keys, then press Enter.



**Step 4** The IP Address will be shown on the screen automatically. Please make notes of it.



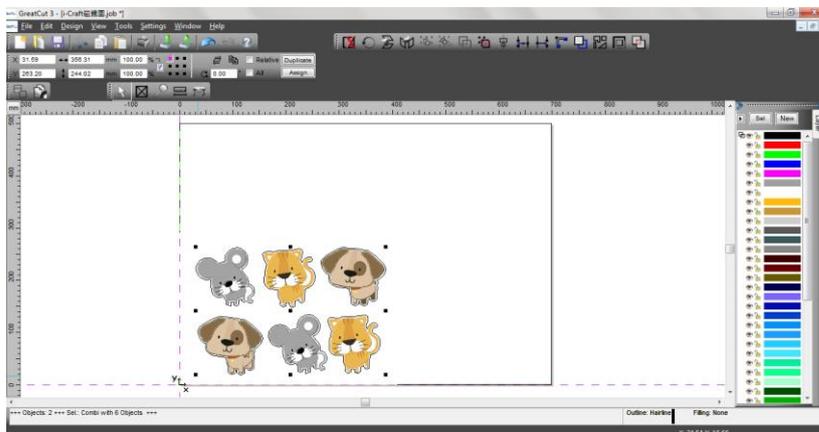
## B) Ethernet Connectivity Setup

There are two ways to output your plot through Ethernet. If you output your plot through GreatCut, please follow the instruction **I. Output through GreatCut**; if you output your plot through Adobe Illustrator or CorelDRAW, please follow the instruction **II. Output through the Ethernet Driver**.

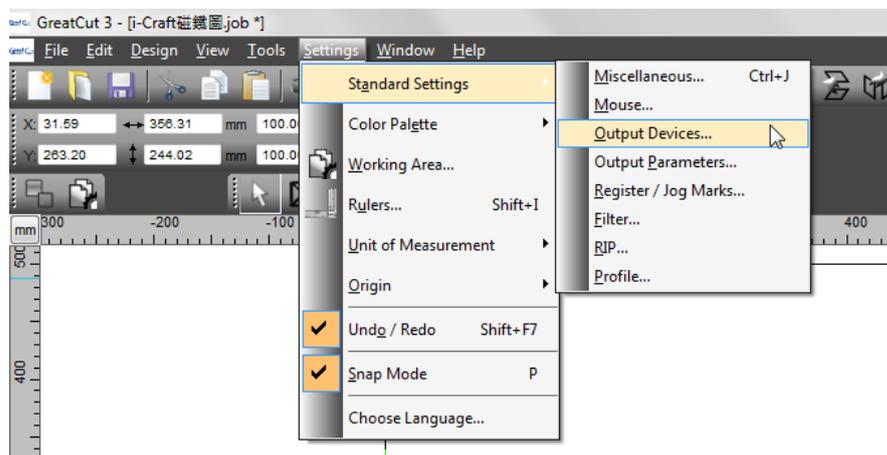
### I. Output through GreatCut

Instruction of Ethernet settings for GreatCut:

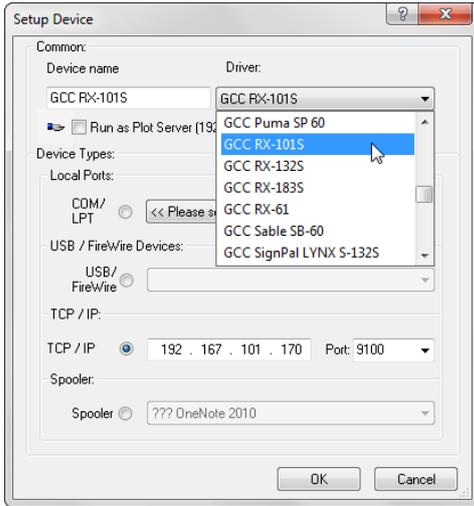
**Step 1** Open GreatCut and create a new file and cutting line.



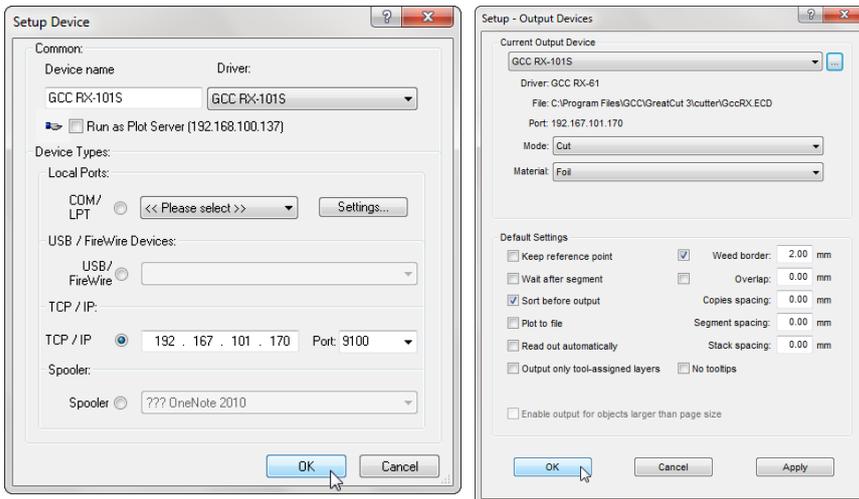
**Step 2** Go to **Output Devices** under Settings.



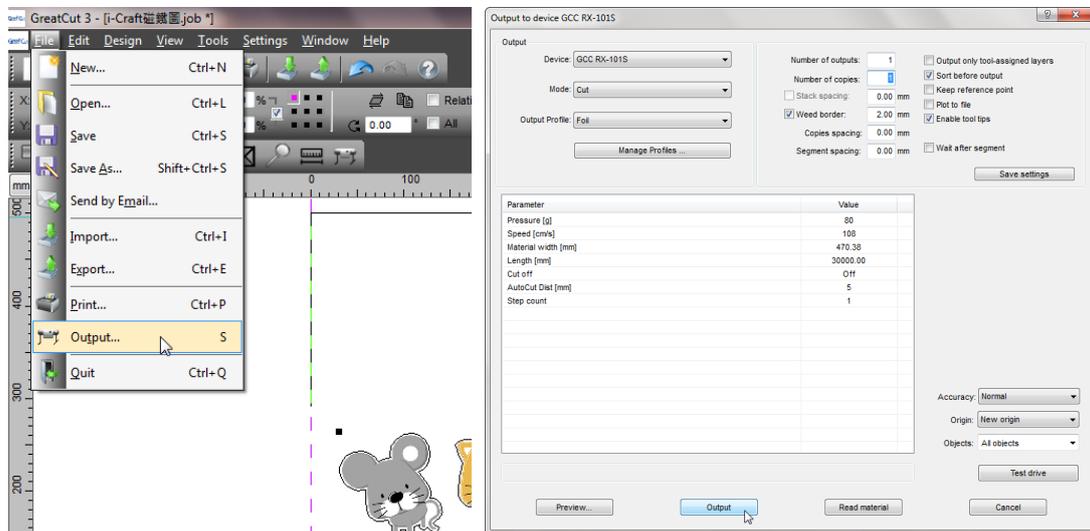
**Step 3** Select a model at Driver in Setup Device window



**Step 4** Input the IP address you had acquired from the control panel to the TCP/IP. Click OK to complete settings.

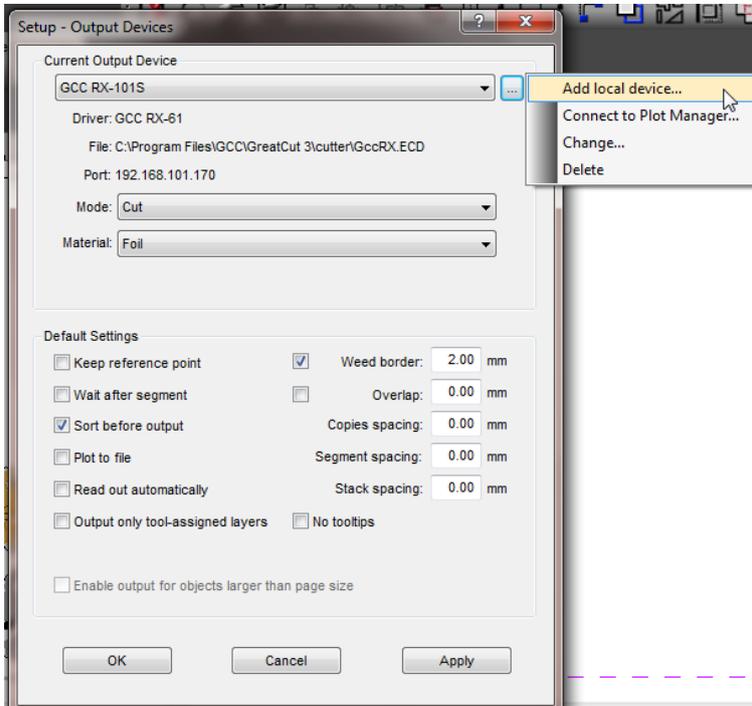


**Step 5** Go to **Output** under File to check the settings.



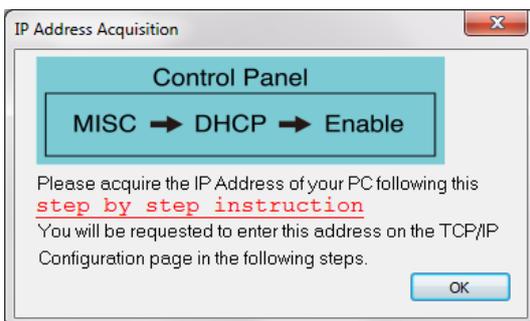
**Step 6** Complete the driver installation process and your GCC Cutting Plotter is now allowed to network.

**Note:** If you want to add new local device, please go to **Output Devices** under Settings, and press the button on the right of Current Output Device and select **Add local device** (if the device has been installed but you wanted to output through another device, please select **Change** to set the IP address of another device).

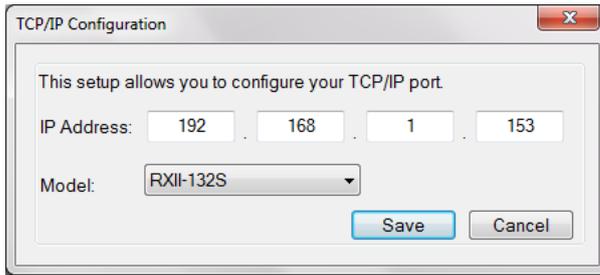


## II. Output through Ethernet Driver

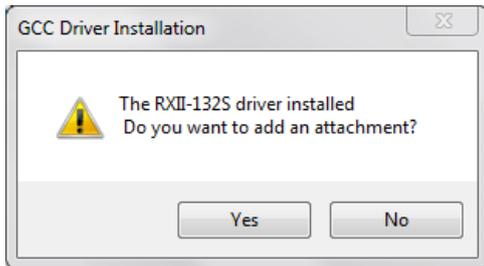
**Step 1** Connect Ethernet cable to PC and install **Cutter Ethernet driver**. Then click OK to continue.



**Step 2** Enter the IP Address shown on the control panel and select the model. (Please refer part 1 instruction.)



**Step 3** The driver is installed. You can output from AI or CoreIDRAW directly now.



### 2.1.4 Data Transmitting

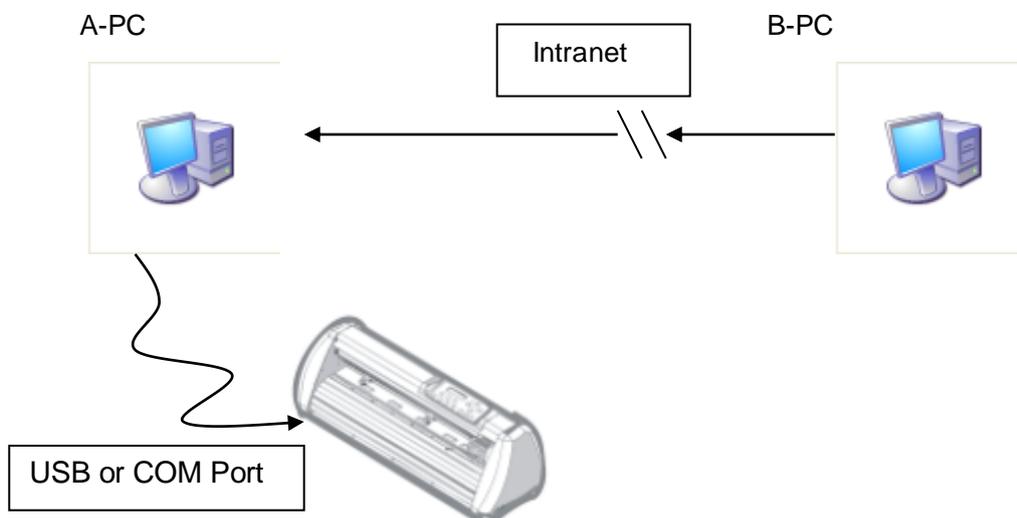
There are two options to transmit the data from the computer to the cutting plotter:

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

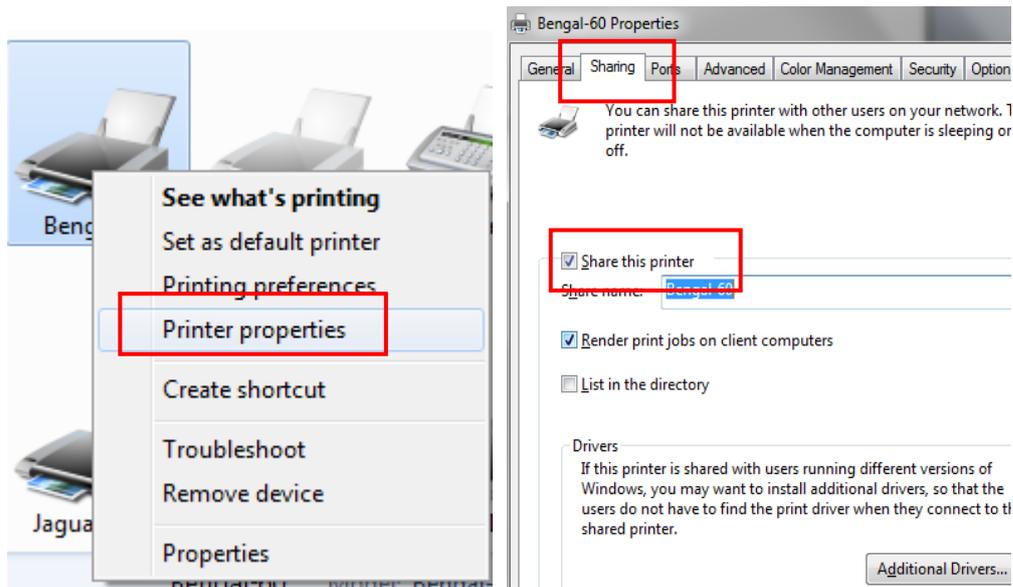
**Option 2:** Most cutting software packages are able to emulate **HP-GL** or **HP-GL/2** commands. As long as the file is **HP-GL** or **HP-GL/2** format, the cutting plotter can output the data precisely.

### 2.1.5 Printer Sever Shared Setting

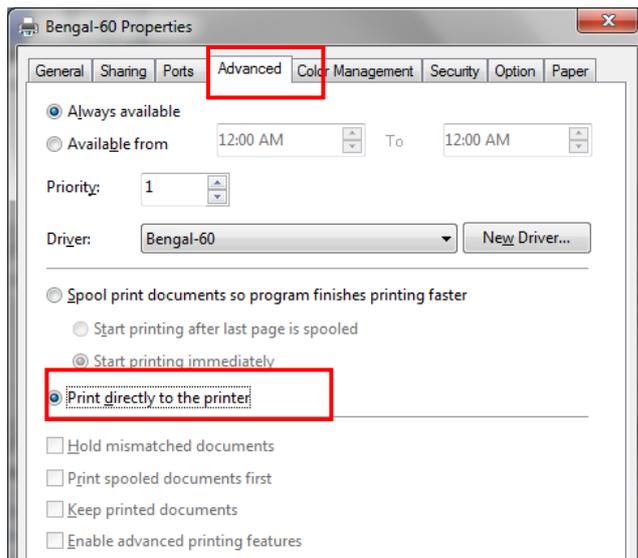
In "A-PC", set the printer driver as a shared printer, then use B-PC to connect A-PC's printer driver via Intranet.



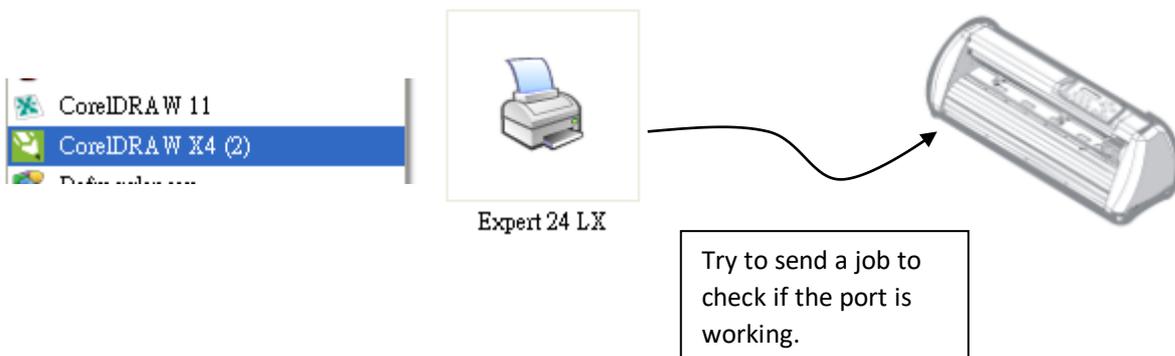
**Step 1** Set A-PC's printer driver as a shared printer (Right-click on printer icon, choose "Printer properties". Click "Sharing" tab then check "Share this printer.")



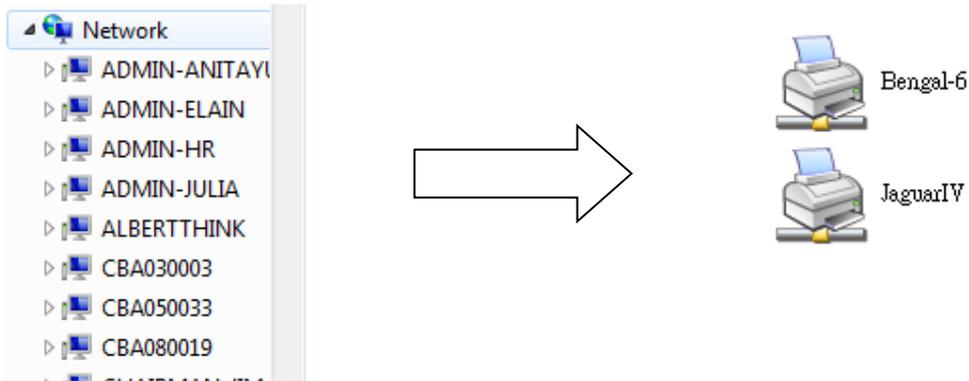
**Step 2** Click "Advanced" tab, then choose "Print directly to the printer" option.



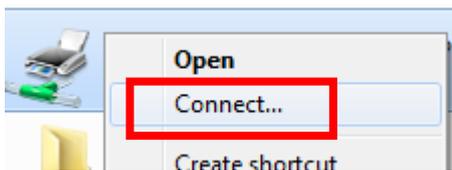
**Step 3** Send a job from A-PC to the machine to check if A-PC is connected to the machine.



**Step 4** Activate A-PC's Printer Driver from B-PC's Network.



**Step 5** Right-click on the printer icon, and select "Connect" to A-PC's printer.



## 2.2 Auto feeder installation

1. Assemble the right and left connecting brackets on both side of the auto feeder with screws to fix the auto feeder to Jaguar V/RXII.



2. Tighten the thumb screw to fix the connecting brackets to the side plate of the Jaguar V/RXII.



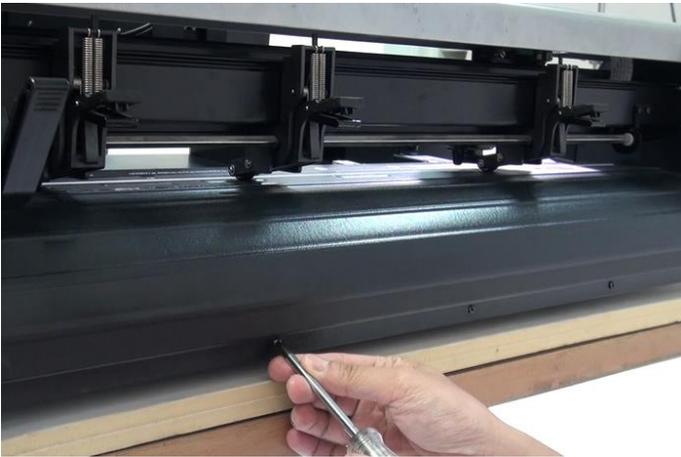
3. Loose the screws on the side brackets of auto feeder.



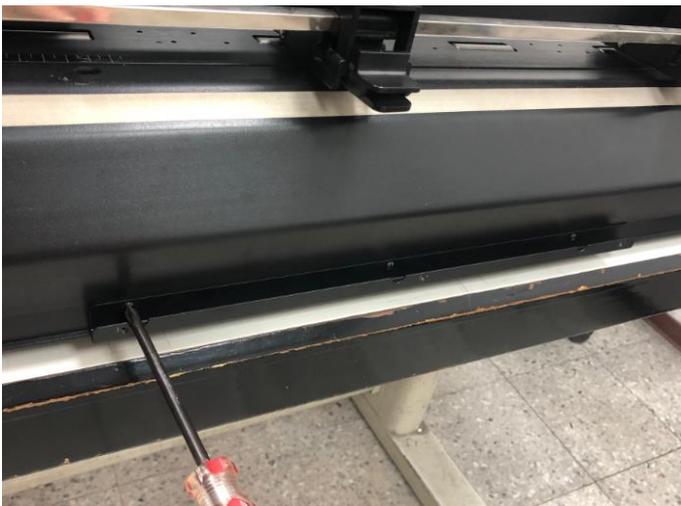
4. Push the side brackets to closely lean against the cutter, and then tighten up the screws.



5. Loose the screw on the rear platen.



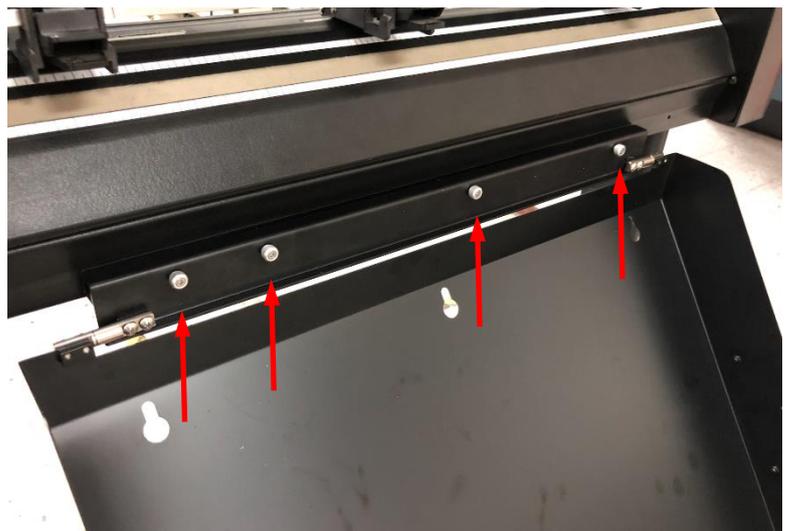
6. Fix the connecting bracket on the rear platen with screws.



7. Assemble the stretchable stands



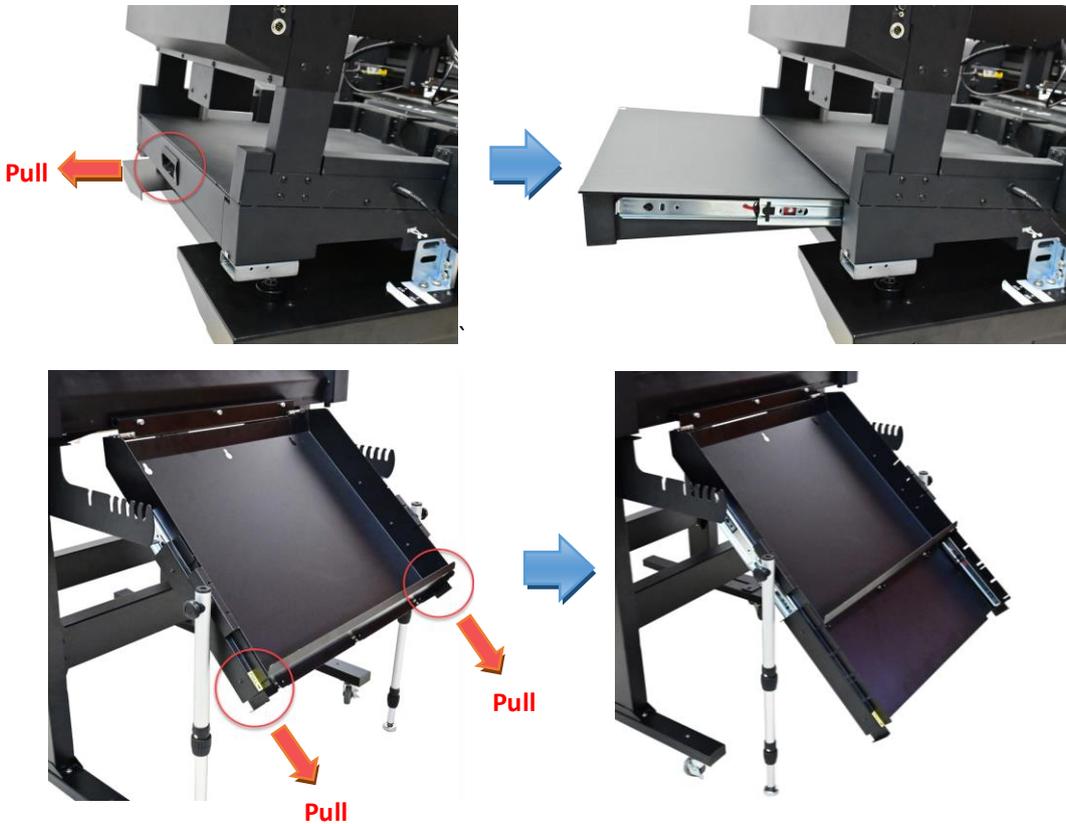
8. Hang the media collection tray onto the connecting holder and tighten it up with hand screw.



9. Put down the stretchable stands on both side reach the ground, then the installation is completed.

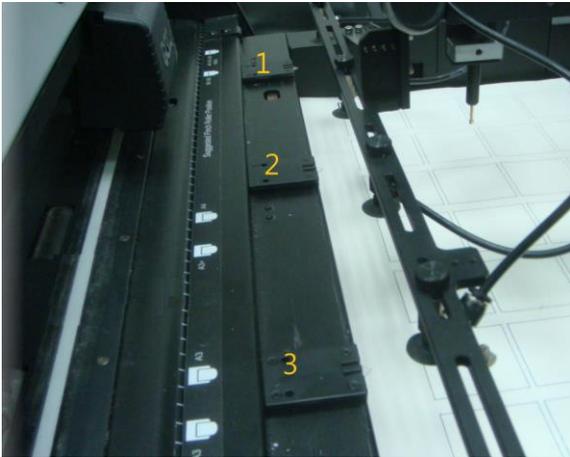


Note: Drawer-type autofeeder design allows users to extend the feeder to accommodate B2 size paper.

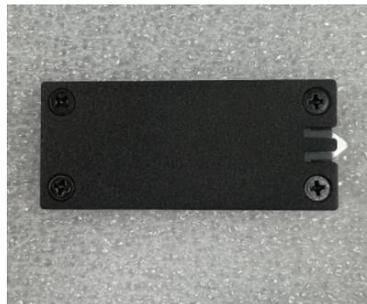
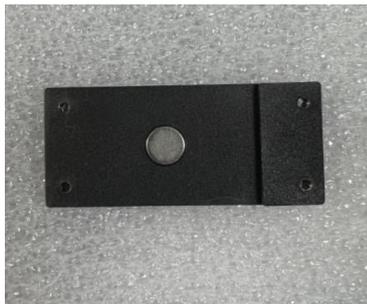


## 2.3 Install the magnetic media separator

The function of a magnetic media separator is to prevent sheet media from double feeding while loading sheet media to a cutter.



A magnetic media separator contains a magnet which is used to attach the media separator to a feeder. Users can move the magnetic media separators to a proper position whenever needed.



## 2.4 Blade and Blade Holder Installation

### 2.4.1 Blade Installation

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.



**Step 1** Install blade.



**Step 2** Push the blade to the bottom of the blade holder.



**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. That is, if the thickness of film is 0.5mm, then blade's length is properly adjusted 0.6mm and it can completely cut through the film layer yet avoid penetrating the backing.

## 2.4.2 Blade Holder Installation

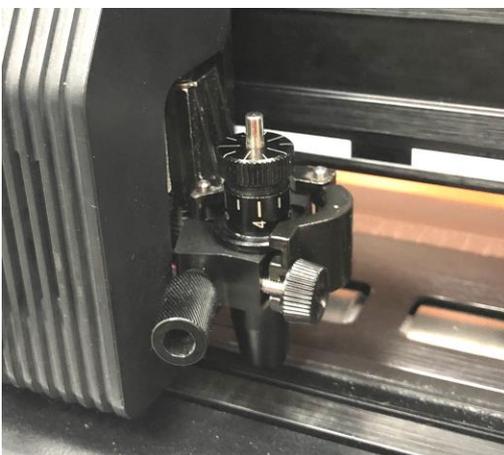
**Step 1** Loosen thumb screw and insert the blade holder into extension holder



**Step 2** Fasten the thumb screw to fix the tool carriage.



**Step 3** The machine is ready to use.



**Step 4** Use the reversing steps to remove the blade holder.

**Step 5** Eject the blade. Push “Blade eject pin” to eject blade when the blade needs to be replaced.

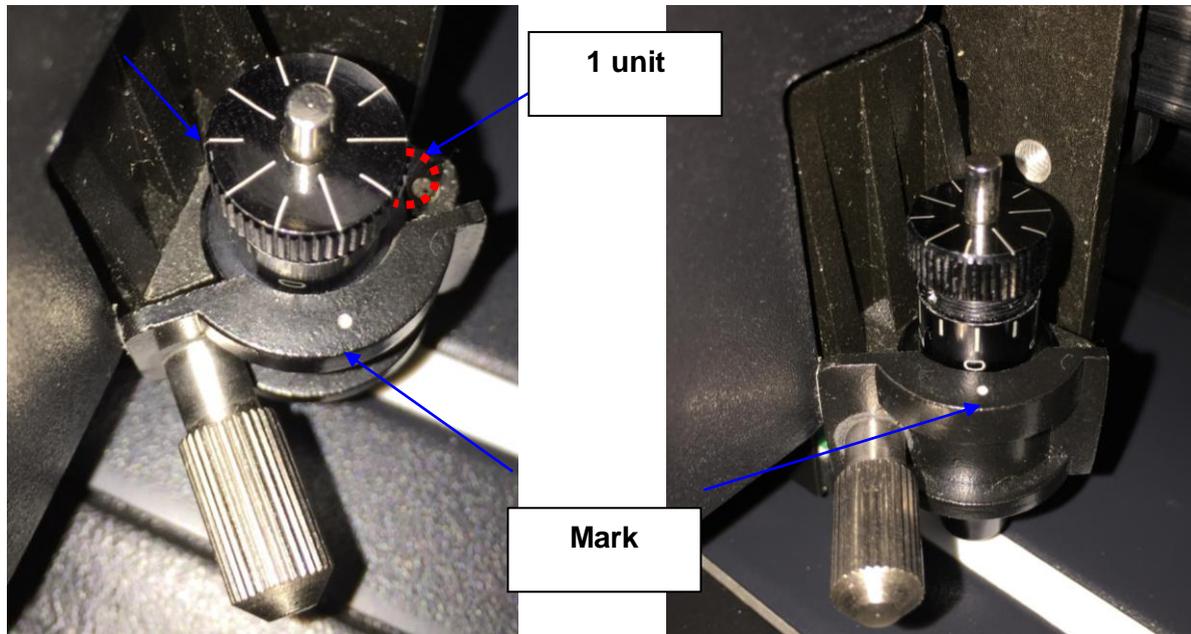
**Caution**

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.

## 2.5 Automatic Blade Length Detection

The photos show a new blade holder with a scale and a carriage with a mark. This blade holder detects blade length automatically and shows how the knob needs to be turned on the LCM.



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.

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

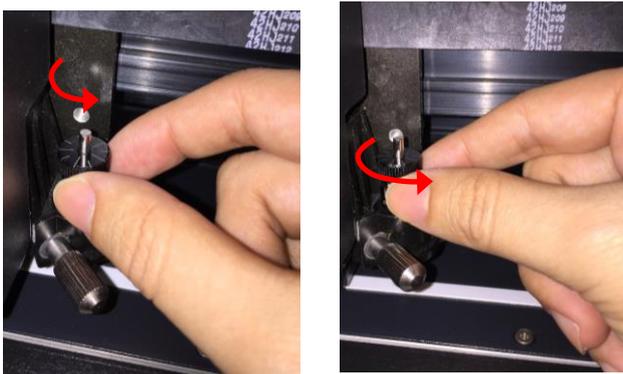
1. Keep the blade tip within the blade holder before you start adjusting.
2. Align one of the scales on the blade holder to the mark on the carriage
3. Select "Blade Length Adjust" under "CUT TEST" on the LCM, and enter the blade length wished in "Set Length"; test the blade holder first and then test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

e.g. Turn CW 5 means to turn the knob for 5 units clock-wisely.

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.

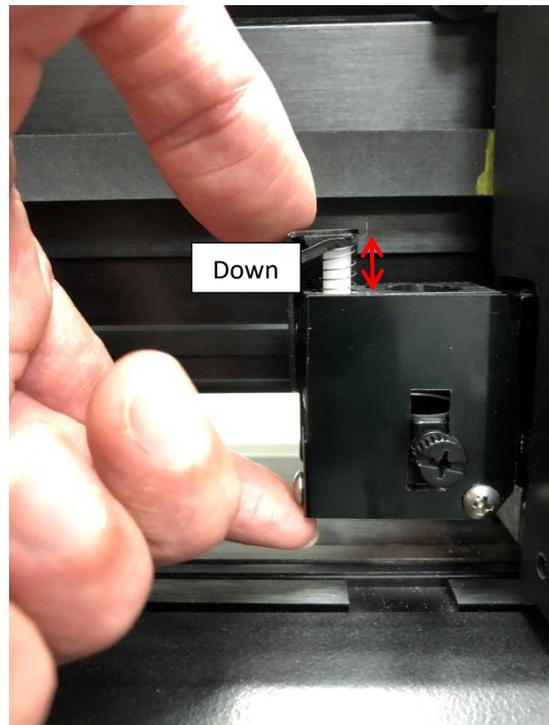


## 2.6 Creasing Tool Installation

1. Remove the Creasing tool and holder from the carriage.



2. Make sure the cylinder is at "Down" position

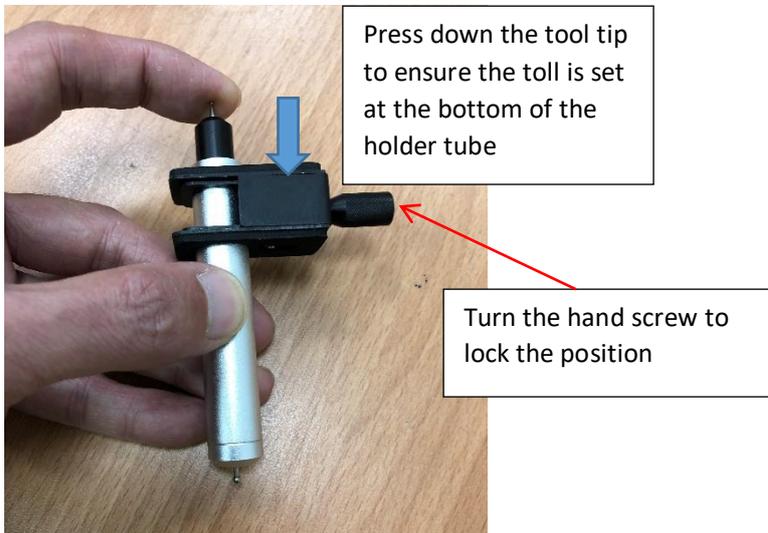


Press the cylinder by hand and hold the bottom to ensure the VCM to be hold while pressing. As shown on above pictures.

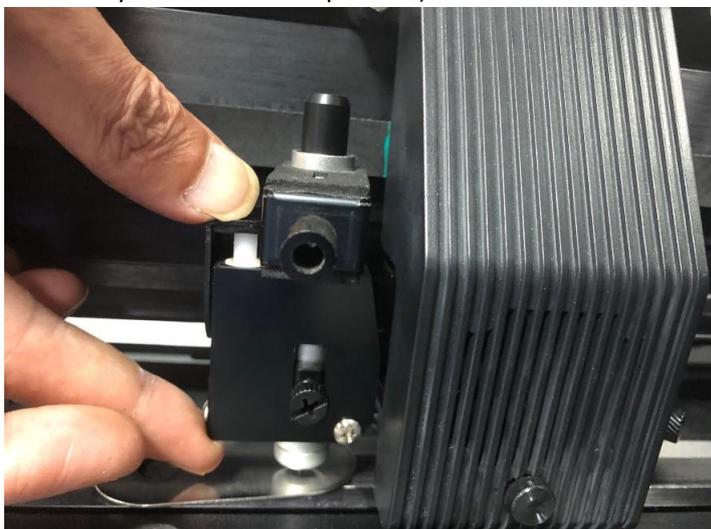
3. Insert the creasing tool into the holder tube



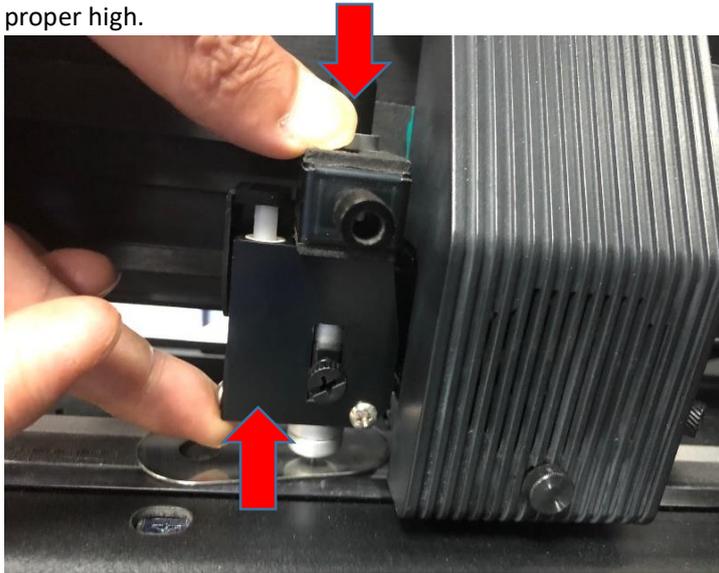
Make sure the tool is insert to the bottom of the holder tube and turn the hand screw to lock its position



4. Place the high adjustment jig under the creasing tool position and insert the creasing tool holder (Make sure the cylinder is in Down position).

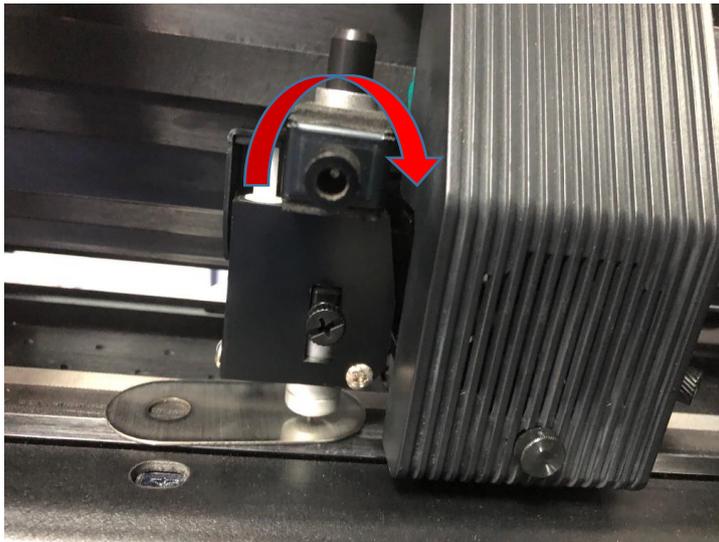


5. Press the top of the creasing tool and hold at bottom of the cylinder to ensure the holder is set at the proper high.



Note: Lower finger have to hold the system up.

6. Turn the lower hand screw to lock the position of creasing toll and holder



Completed. Dis-engage the crease tool holder and reboot the machine and size to check.

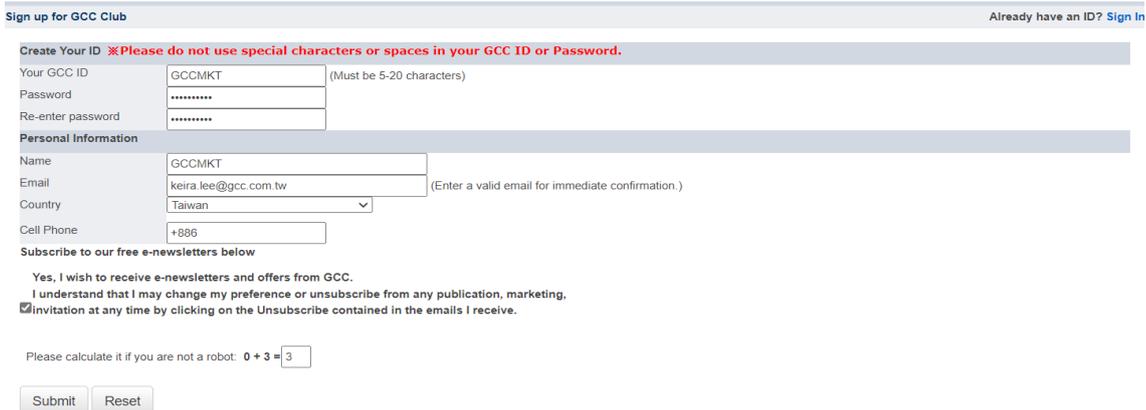
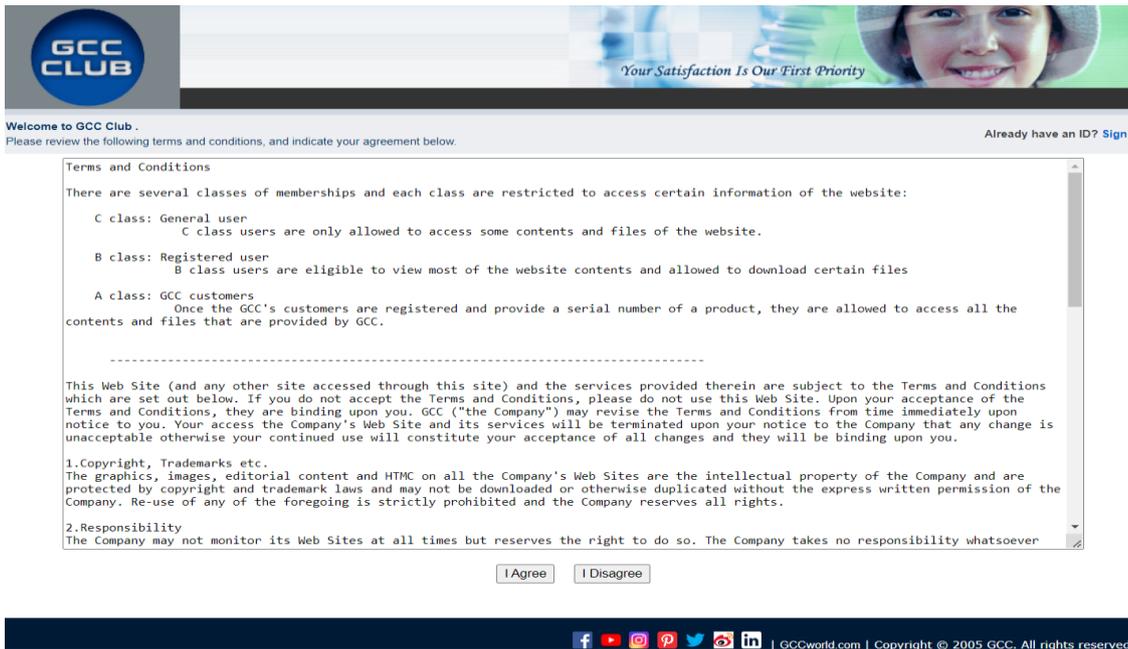
## 2.7 Software Installation

### 2.7.1 GreatCut-S Auto Installation

1. Visit <http://gccf.gcc.com.tw/gccclub/login.aspx> and log in your GCC Club account.



or create a new GCC club account if you do not have one. Click “I Agree”, fill in the required information and click “Submit” to sign up.



You should receive an eMails with activation link and click the link to activate your account.

Thank you for registering with the GCC Club. Please find your registration information below.

\*Please be sure to click  
[http://gccf.gcc.com.tw/gccclub/mail\\_confirm.aspx?enable=Y&ID=GCCMKT1&Name=GCCMKT&lang=](http://gccf.gcc.com.tw/gccclub/mail_confirm.aspx?enable=Y&ID=GCCMKT1&Name=GCCMKT&lang=)  
 to activate your account.

| Personal Information |                      |
|----------------------|----------------------|
| Name                 | GCCMKT               |
| Email                | keira.lee@gcc.com.tw |
| Cell Phone           | +886972066897        |
| Country              | Taiwan               |

Please note that most of the contents on the GCC Club are exclusive to GCC product owners. If you own a GCC machine and its serial number starts "H" to "L", we encourage you to register your product to receive an additional 3-month limited warranty extension. Other Benefits include: product applications, tips and parameters, technical support and trouble shooting tips, driver and software updates, user manual document.

2. Go to GCC Club, click "GreatCut-S voucher code" on the left side.

3. Enter your voucher code and click "submit".

4. You will get your GreatCut-S serial number.

Welcome : GCC-MKT

GreatCut-S Product Key

| GreatCut-S Key List    |                                      |
|------------------------|--------------------------------------|
| Date                   | 2022/10/11 上午 05:24:21               |
| Product Name           | Cutting Plotter / Puma IV / P4-132LX |
| Machine S/N            | W70233                               |
| Voucher Code           | AALD2MPORF7LVPDP4KQQ                 |
| GreatCut-S Product Key | AC198BD4-BDA8-4B1F-8CCA-712086A0D9D6 |

Obtain Your Product Key

Voucher Code

Please calculate it if you are not a robot: 8 + 7 =

5. Visit <https://www.gccworld.com/download.php> click the product category and choose a proper model.

Or browse by machine model

Vinyl Cutter

Laser Engraver

Laser Cutter

Download Area

Vinyl Cutter

Expert II A

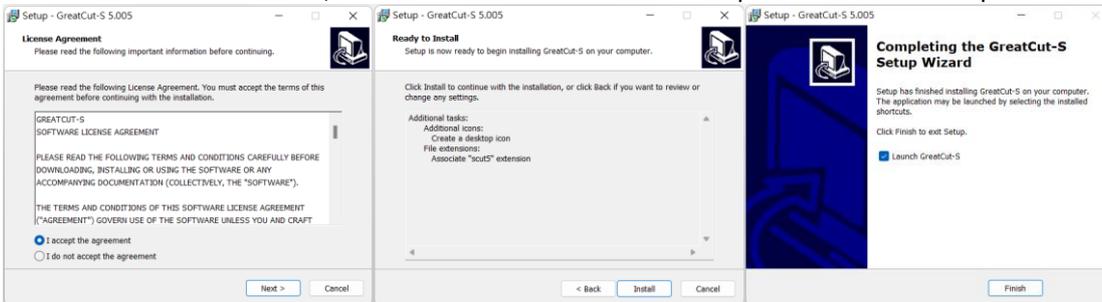
i-Craft™ 2.0

AR-24

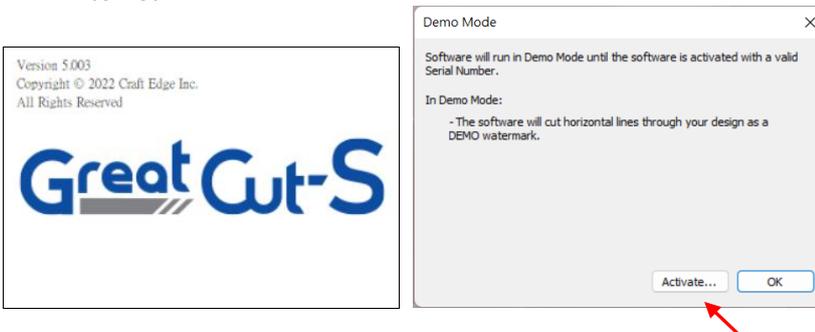
6. Download GreatCut-S to start the installation.

| Software                        |         |                          |
|---------------------------------|---------|--------------------------|
| Title                           | Size    | Download                 |
| Sure Cuts A Lot Pro 5 _Win64bit | 52.1 MB | <a href="#">Download</a> |
| Sure Cuts A Lot Pro 5 _Win32bit | 34.0 MB | <a href="#">Download</a> |
| Sure Cuts A Lot Pro 5_Mac       | 39.9 MB | <a href="#">Download</a> |
| SignPal V19                     | 818 MB  | <a href="#">Download</a> |
| GreatCut-S for Windows          | 303 MB  | <a href="#">Download</a> |
| GreatCut-S for Mac              | 303 MB  | <a href="#">Download</a> |

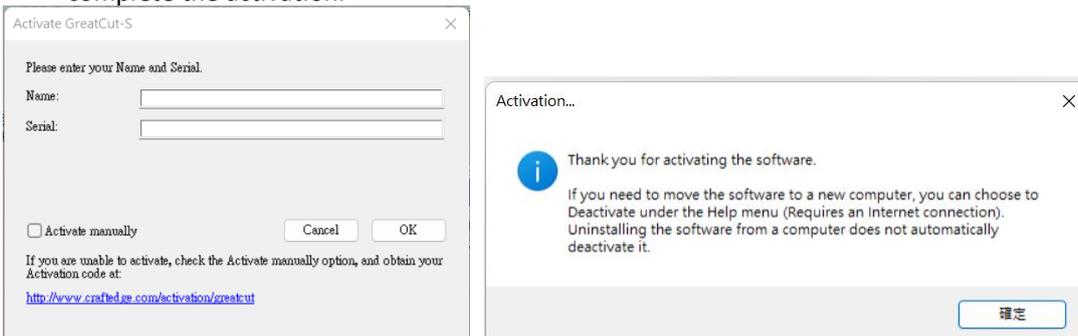
7. Press Next to continue, tick “Launch GreatCut-S” and then press “Finish” to complete the installation.



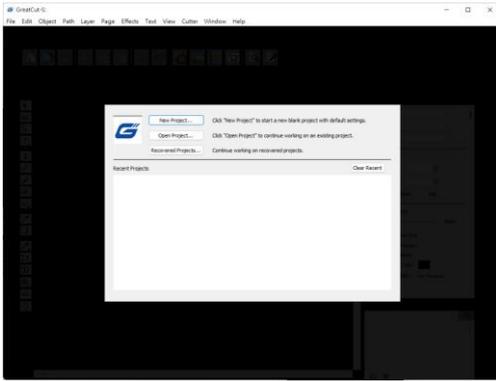
8. Run GreatCut-S and press “Activate...” to activate GreatCut-S. Please make sure it is connected to the internet.



9. Enter your name in the Name column and GreatCut-S serial number to the Serial column and press “OK” to complete the activation.



10. GreatCut-S is ready to use.



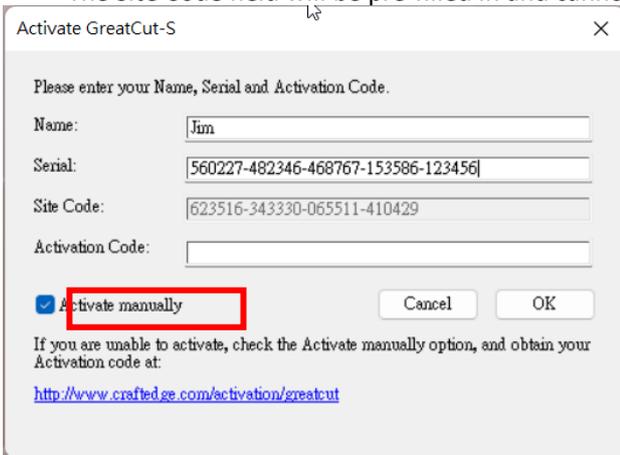
**Note**

- ✓ If you use a trial version to output graphics, meaning you do not enter the software key to activate the Sure Cuts A Lot mentioned above, there will be two extra lines cut through the design, therefore, make sure the Sure Cuts A Lot software is activated before implementing cutting jobs.

### 2.7.2 Manually Activate GreatCut-S

If the computer connected to the cutter doesn't have an internet connection to complete the software activation process, you can alternatively use the "Activate manually" function to enter the "Activation Code" and begin using GreatCut-S. However, you will need to find another computer with internet access in advance to obtain the "Activation Code" by following the instructions below.

1. Check the "Activate manually" checkbox and you should see the Site Code and Activation Code fields appear. The Site Code field will be pre-filled in and cannot be changed.



2. Visit <https://craftedge.com/activation/greatcut/> via an internet connected computer. Enter your name, serial and site code.



**Important:** You only need to do the following if you are having trouble activating from within "GreatCut-S" or do not have an Internet connection on the computer you are trying to activate on.

You must activate in order to use the full version of the software. Generally, you will just need to choose Activate.. from the Help menu in GreatCut-S and enter your name and serial number. The software will try to activate automatically and you can disregard this web page. **Do not** use this web page if you have not installed the software yet or have not purchased.

If you view the About box in GreatCut-S and it shows your name and serial number, the software is activated ok.

If you have problems activating automatically, you must use this web page and generate a Manual Activation Code. The Name and Activation Code information is obtained from your purchase confirmation e-mail. The Site Code is obtained by running the program and choosing "Activate.." and checking the "Activate Manually" option.

Name

Serial

(Ex: 123456-123456-123456-123456-123456) What is this?

Site Code

(Ex: 123456-123456-123456-123456) What is this?

**Generate Activation Code**

After entering in your Name, Activation Code, and the Site Code, click the Generate Activation Code button to create your Manual Activation Code. Copy and paste the value back into the " Activation" dialog box in the application to activate your copy.

- Click on the "Generate Activation Code" button, and your activation code will be shown in the Activation Code field.



Activate "GreatCut-S"

**Important:** You only need to do the following if you are having trouble activating from within "GreatCut-S" or do not have an Internet connection on the computer you are trying to activate on.

You must activate in order to use the full version of the software. Generally, you will just need to choose Activate.. from the Help menu in GreatCut-S and enter your name and serial number. The software will try to activate automatically and you can disregard this web page. **Do not** use this web page if you have not installed the software yet or have not purchased.

If you view the About box in GreatCut-S and it shows your name and serial number, the software is activated ok.

If you have problems activating automatically, you must use this web page and generate a Manual Activation Code. The Name and Activation Code information is obtained from your purchase confirmation e-mail. The Site Code is obtained by running the program and choosing "Activate.." and checking the "Activate Manually" option.

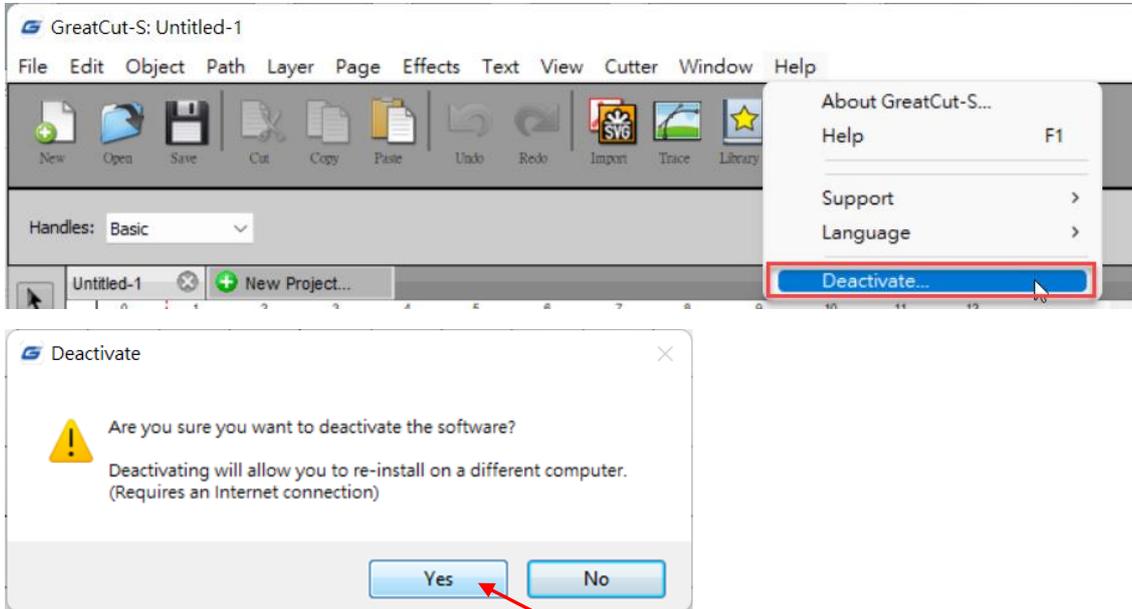
After entering in your Name, Activation Code, and the Site Code, click the Generate Activation Code button to create your Manual Activation Code. Copy and paste the value back into the " Activation" dialog box in the application to activate your copy.

- Copy and paste the activation code back into the activation dialog box of Sure Cuts A Lot program and hit ok.

- Click OK and GreatCut-S is ready to use.

### 2.7.3 Re-install GreatCut-S Software

1. If you change a new computer, you may need to deactivate your GreatCut-S software and re-install it on your new device.
2. Go to “Deactivate...” under Help and press Yes to confirm, then follow the installation procedure and use **the same code** to activate it on another computer.



### 2.7.4 Reset GreatCut-S Serial Code

If you need to re-install the software again due to problems such as a computer crash/reformat where you were not able to de-activate your copy off the computer first, you may visit <https://craftedge.com/activation/deactivateGC.php> to reset your serial number



#### Deactivate "GreatCut-S"

This page can be used to reset your serial number if you need to re-install the software again due to problems such as a computer crash/reformat where you were not able to de-activate your copy off the computer first.

If you still have an activated copy installed and you wish to deactivate to install on a different computer, you can choose Deactivate under the Help menu in GreatCut-S instead of using this webpage. The deactivation option in GreatCut-S requires an internet connection.

**Important:** You will only be able to use this page on a limited basis to reset your serial number. If you need your serial reset again after using this page, you will need to contact GCC Support for help.

**IP Address Logged: 180.218.237.36**

Name:   
Email:   
Serial:

Please describe the reason you are needing to reset your serial number

Submit

## 2.8 Desktop Flexible Media Support System (machine only)

The following installation of desktop flexible media support system is only used in the machine individually without assembling with auto feeder.

### Step 1

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 2-13)

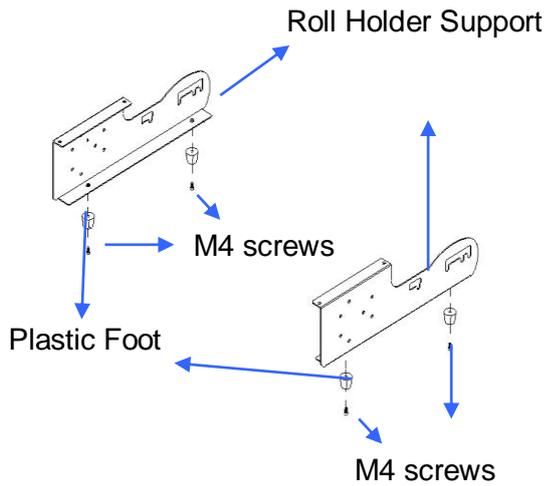


Figure 2-13

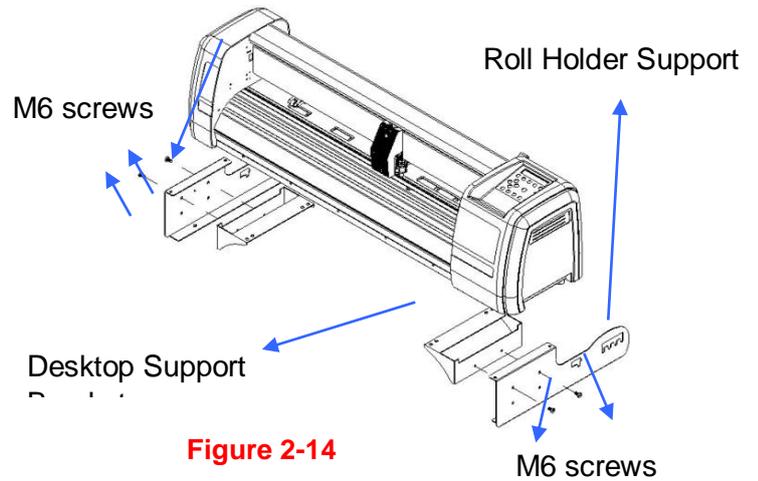


Figure 2-14

### Step 2

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 2-14).

### Step 3

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 2-15.

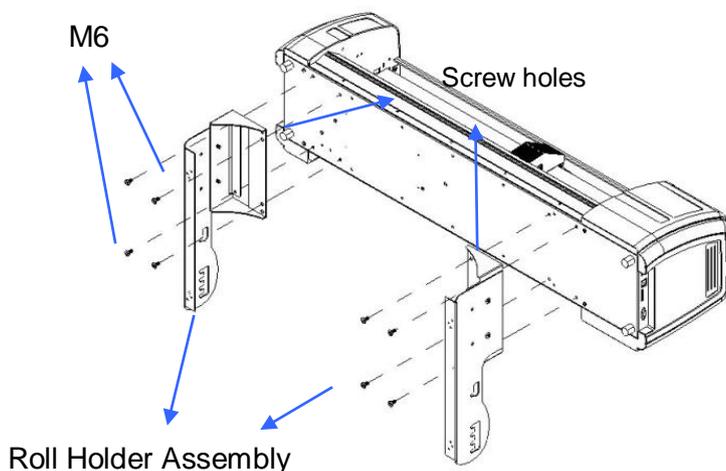


Figure 2-15

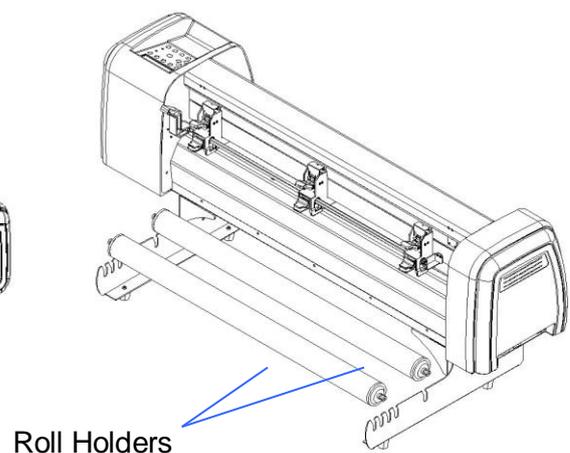


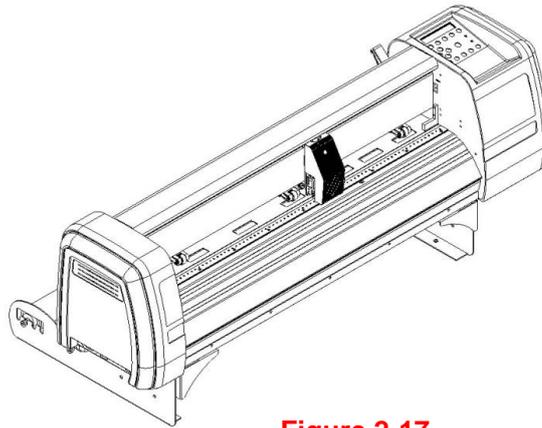
Figure 2-16

**Step 4**

Place the two roll holders into the holes of Roll Holder Support (Figure 2-16).

**Step 5**

The complete Desktop Media Support System will be shown as in Figure 2-17.



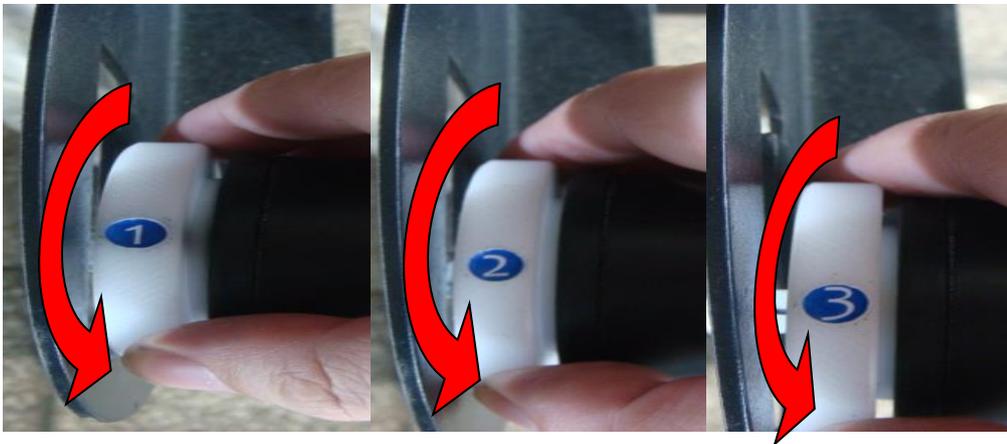
**Figure 2-17**

## 2.9 Instruction of Damper Roller (machine only)

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 (Figure 2-18,19).



**Figure 2-18**



**Figure 2-19**

## 2.10 Replacing Cutoff Blade

**Step 1** Unscrew the Cover from the Tool Carriage using a screw driver (Figure 2-31 and 2-32).



Figure 2-31

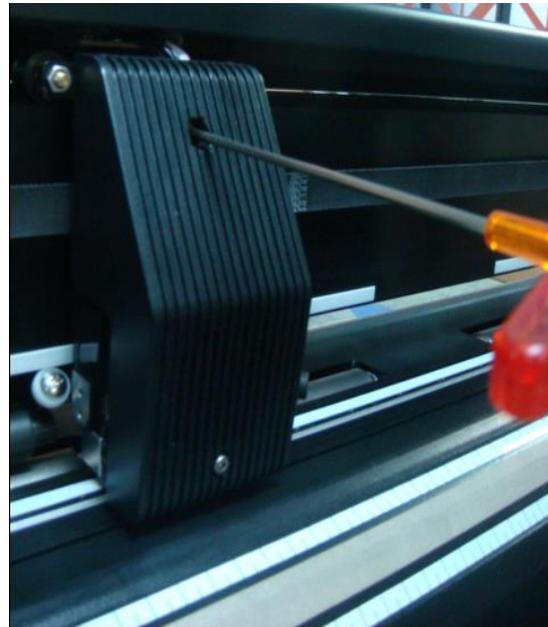


Figure 2-32

**Step 2** Manually disassemble the Cover, which will still be connected to the Tool Carriage through wires (Figure 2-33 and 2-34).



Figure 2-33

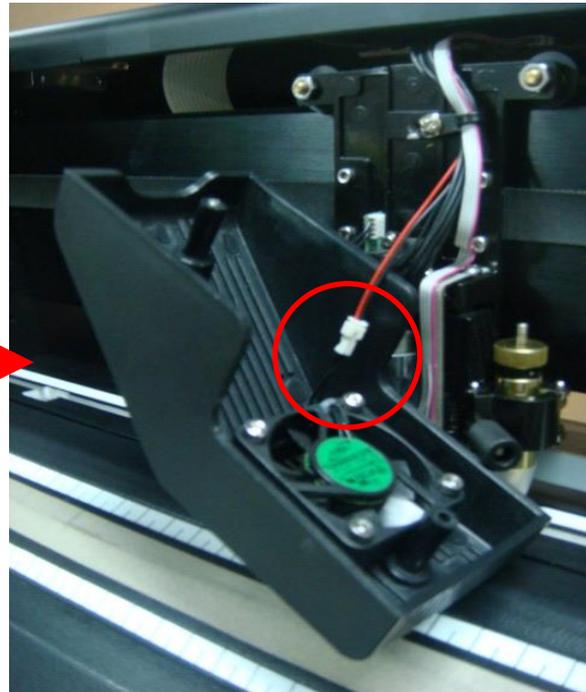
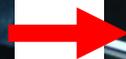


Figure 2-34

**Step 3** Disconnect the black and red wires between the Cover and the Tool Carriage from the white Wire Joint and the Cover will be removed completely (Figure 2-35 and 2-36).

**Note:** Please disconnect the wires at the white Wire Joint with care as the fans will not be working if these wires are split elsewhere.



Figure 2-35

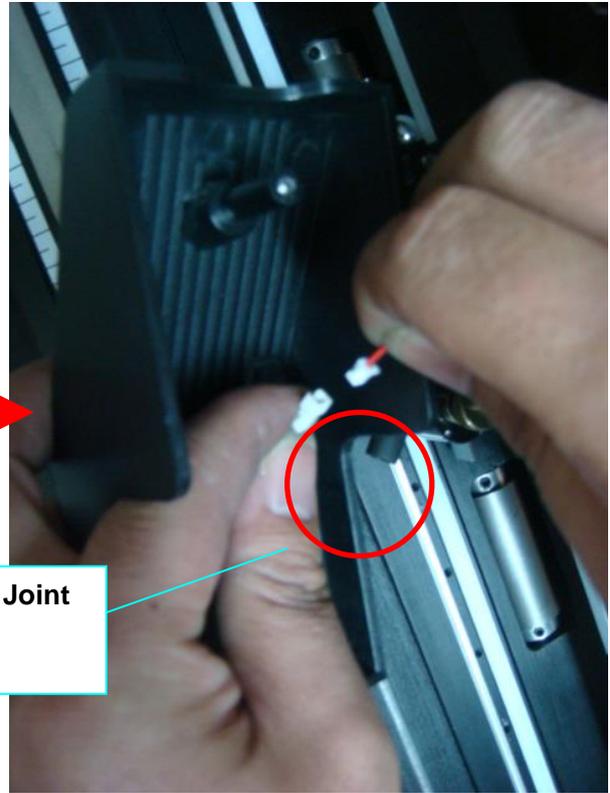
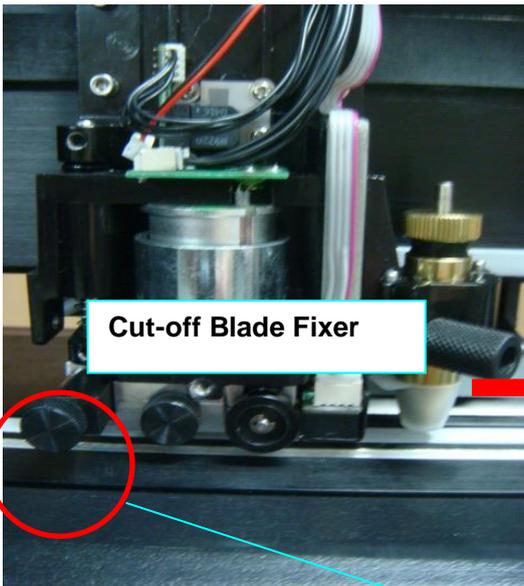


Figure 2-36

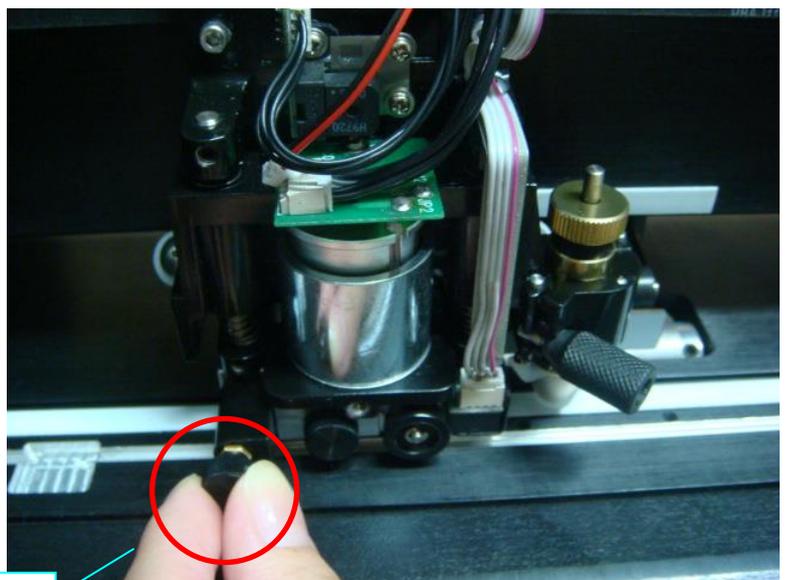
Wire Joint

**Step 4** Remove the screw on the left of the Cut-off Unit manually (Figure 2-37 and 2-38).



Cut-off Blade Fixer

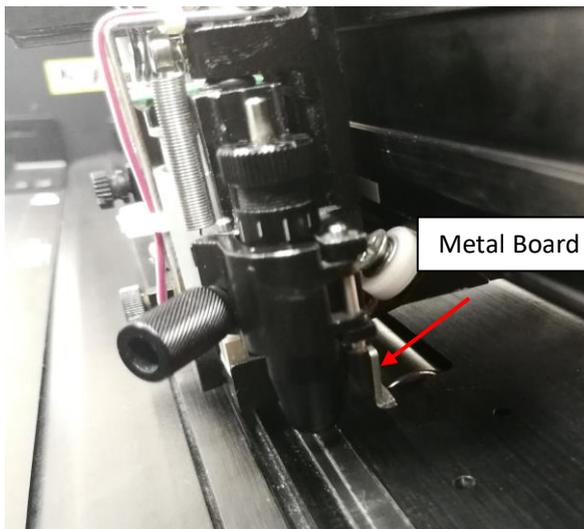
Figure 2-37



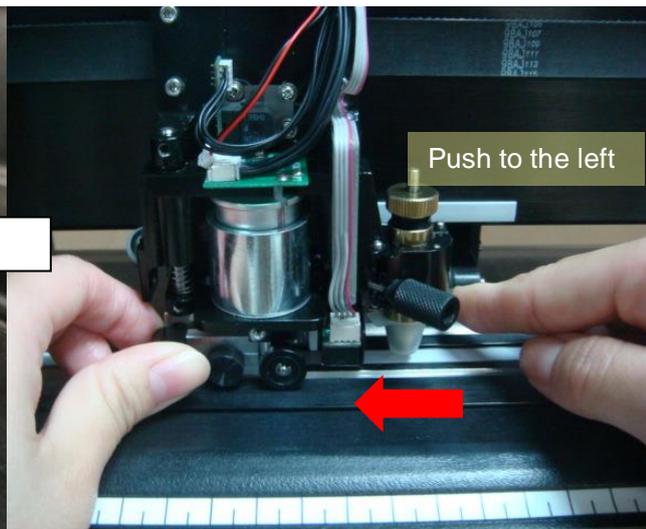
Screw

Figure 2-38

**Step 5** Remove the entire Cut-off Unit by holding it while pushing the tiny metal board on the right to the left (Figure 2-39 and 2-40).

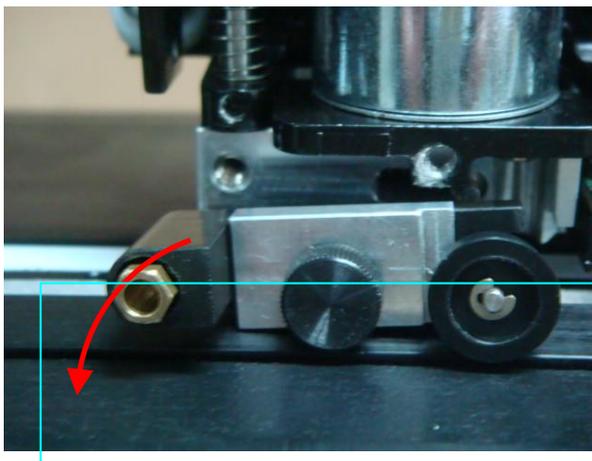


**Figure 2-39**



**Figure 2-40**

The Cut-off Unit will drop automatically once the board is pushed to the left (Figure 2-41).



**Figure 2-41**

**Step 6** Remove the screw from the Cut-off Unit (Figure 2-42 and 2-43) and disassemble the Cut-off Blade Fixer by pulling it up vertically (Figure 2-44).



**Figure 2-42**

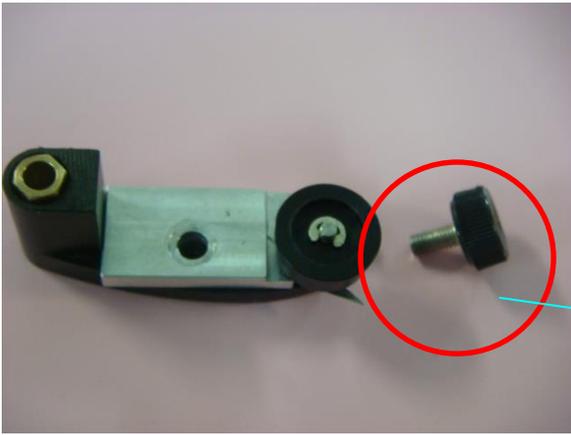


Figure 2-43

Screw

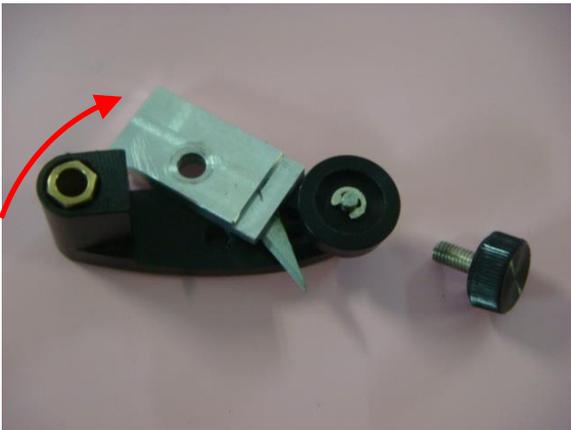


Figure 2-44

**Step 7** Unscrew the Cut-off Blade from the Cut-off Blade Fixer, which will be attracted by the magnet on it, and replace it with a new Cut-off Blade along the track highlighted in red using tweezers (Figure 2-45 and 2-46).

**Note:** The Cut-off Blade is sharp so please handle with care.

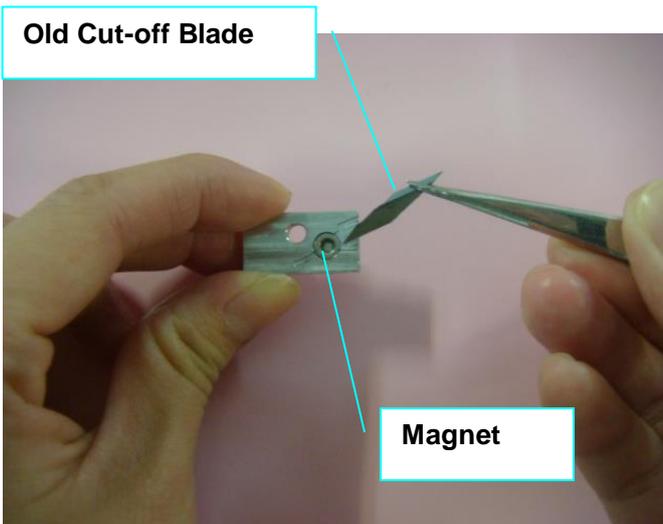


Figure 2-45

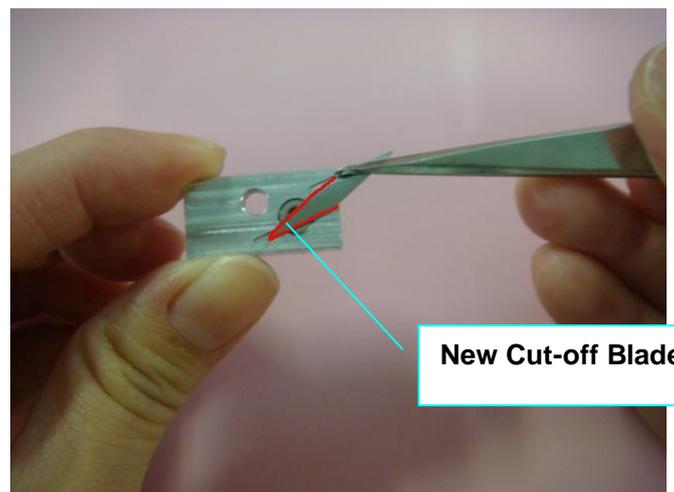
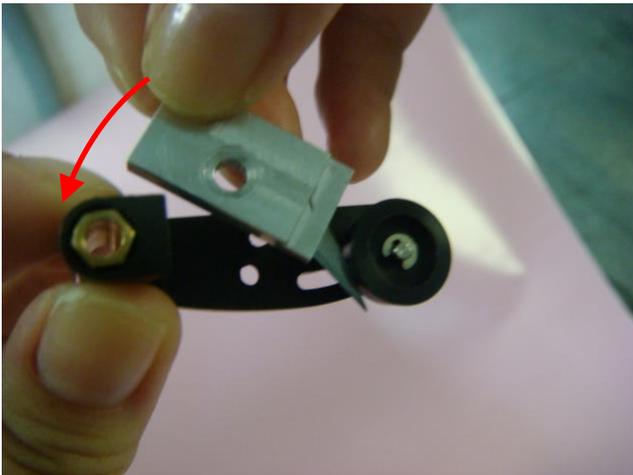
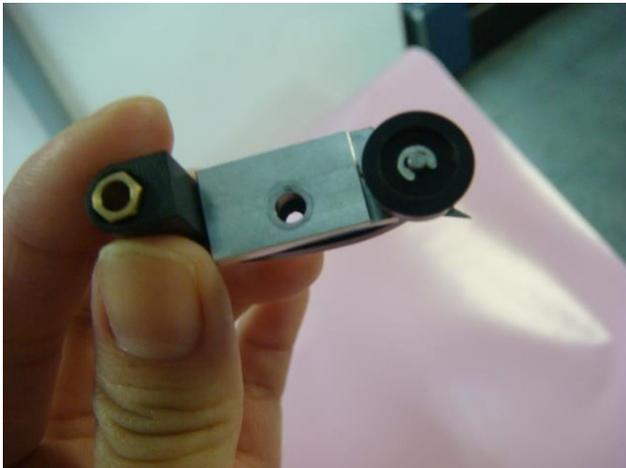


Figure 2-46

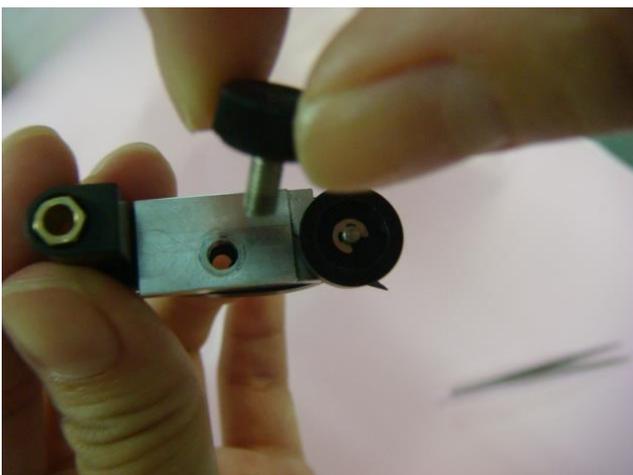
**Step 8** Assemble the Cut-off Blade Fixer back to the Cut-off Unit by pushing the Holder downwards (Figure 2-47 and 2-48) and attach the screw (Figure 2-49).



**Figure 2-47**



**Figure 2-48**



**Figure 2-49**

**Step 9** Assemble the Cut-off Unit back to the Tool Carriage by pushing the metal board on the right while pushing the Cut-off Unit upwards (Figure 2-50 and 2-51) and attaching the screw (Figure 2-52).

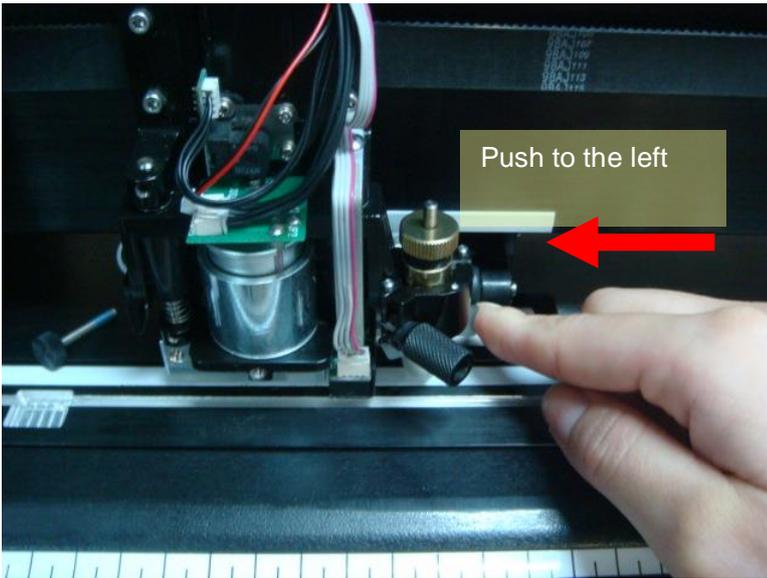


Figure 2-50

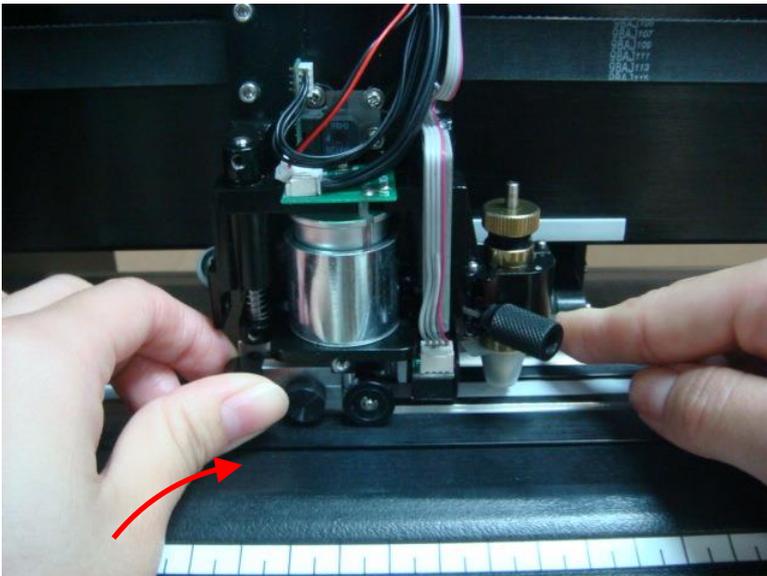


Figure 2-51

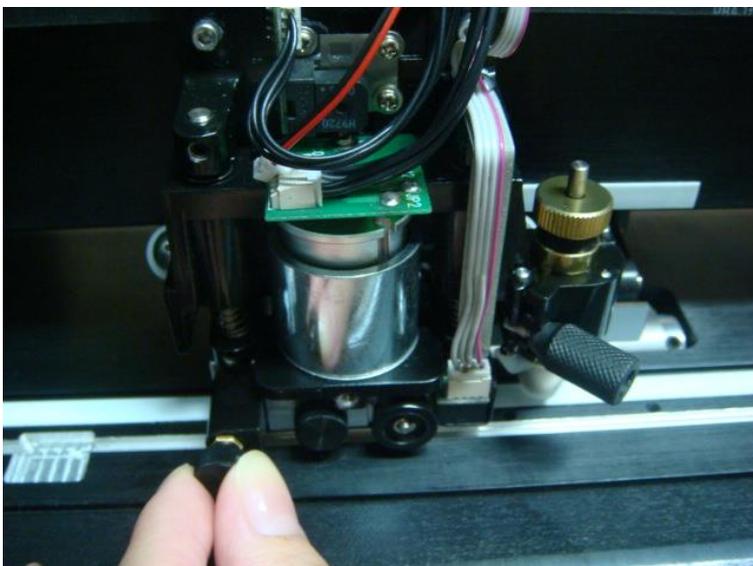


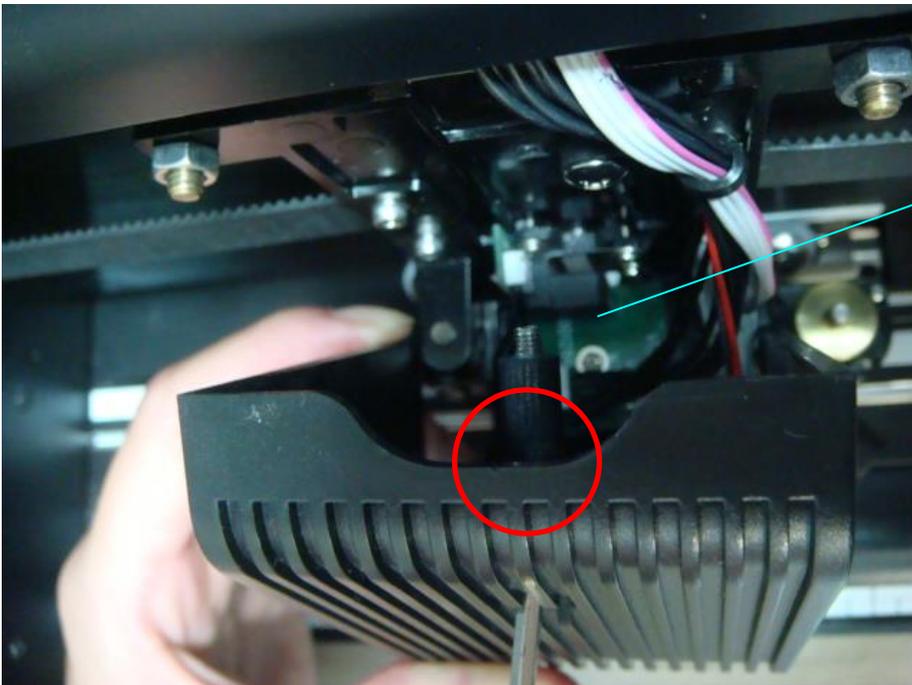
Figure 2-52

**Step 10** Reconnect the wires at the white Wire Joint (Figure 2-53).



**Figure 2-53**

**Step 11** Assemble the Tool Carriage Cover back to the Tool Carriage; please locate the end of the screw to the hole on the carriage before tightening the screw (Figure 2-54).

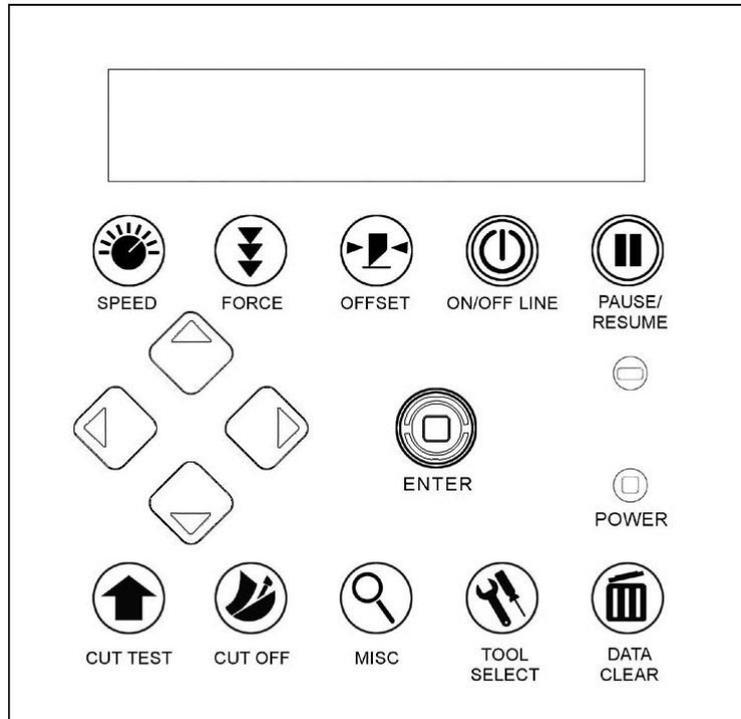


**End of Screw**

# Chapter 3 The Control Panel

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

## 3.1 The Touch Key Panel



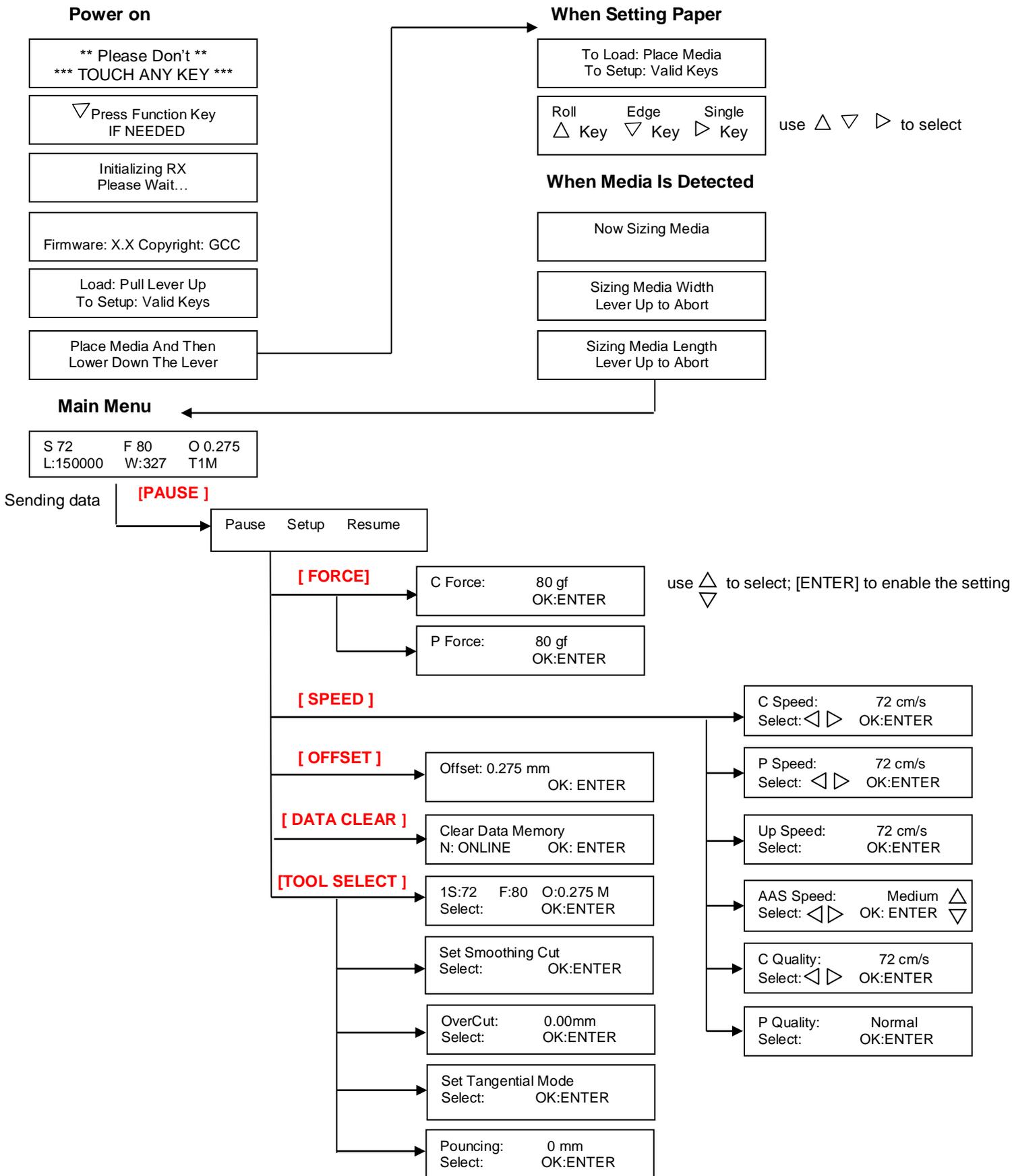
< Touch Key Panel on RX II series >

| 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                        |
| N/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.                                     |

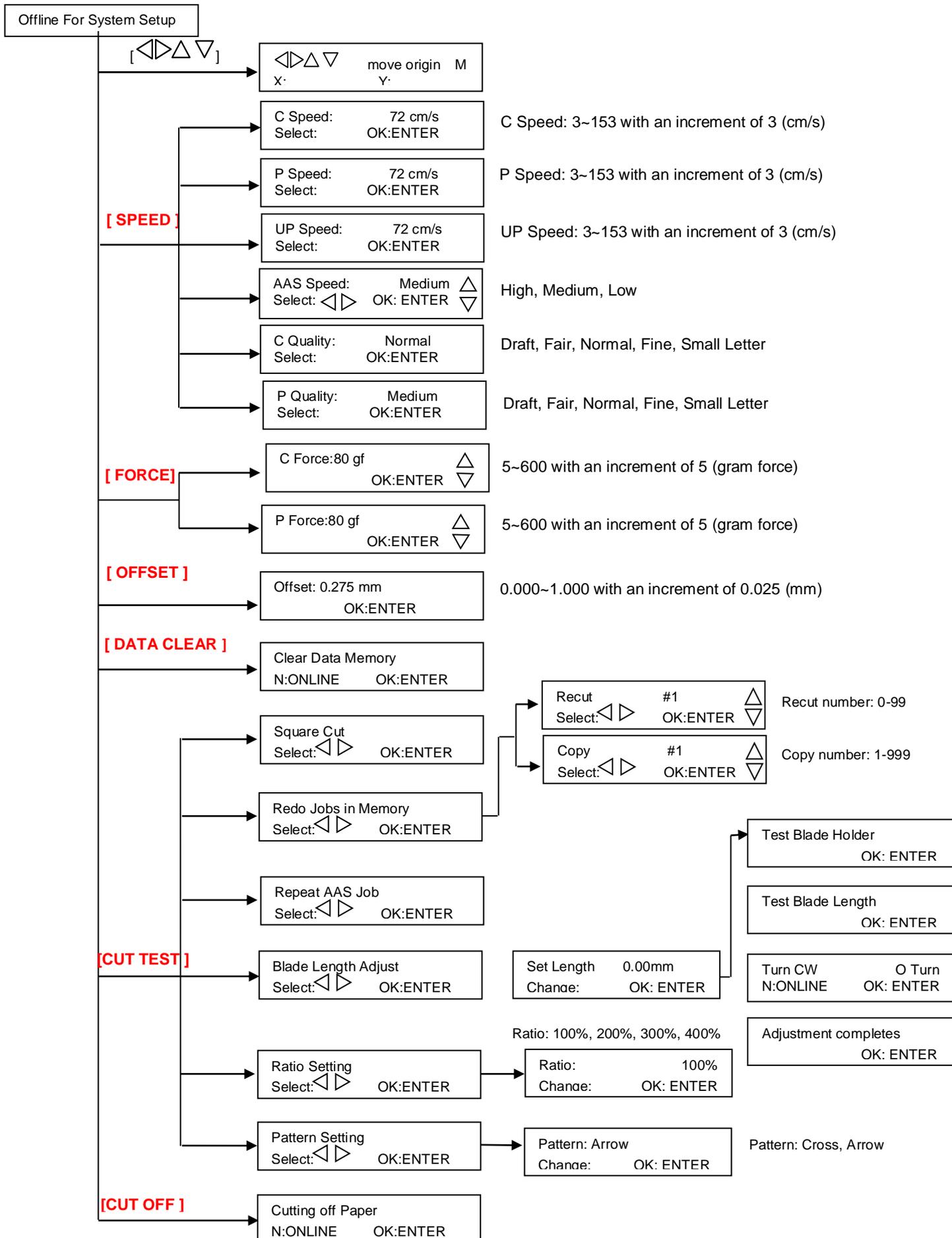
|             |  |
|-------------|--|
| SPEED       | To adjust the value of cutting speed and quality.  |
| CUT TEST    | To perform cutting test on different media.        |
| CUT OFF     | To cut off the material when the job is completed. |
| MISC        | To set up functions.                               |
| TOOL SELECT | To select tools.                                   |
| DATA CLEAR  | To clear up internal memory.                       |

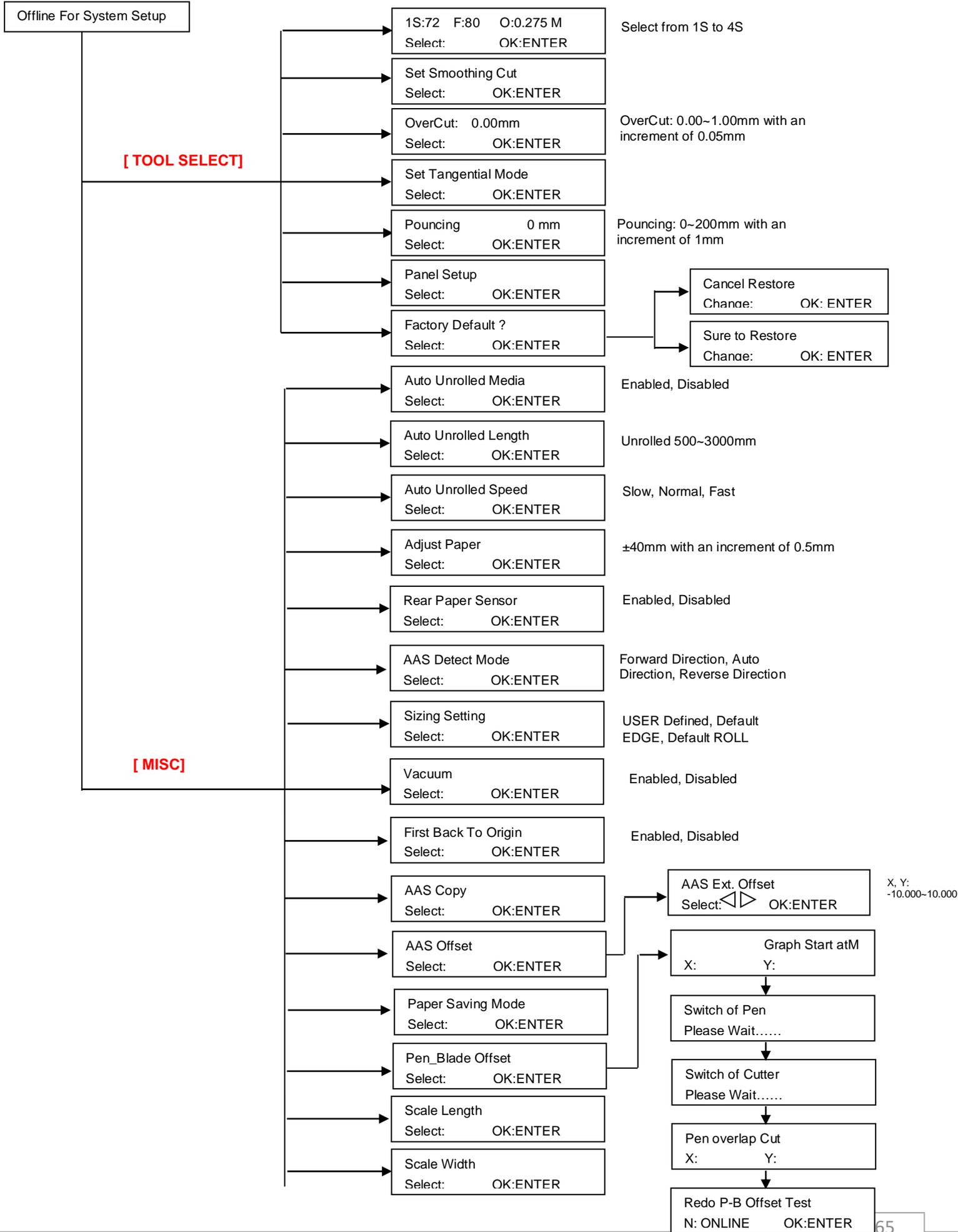
Please see details in "3.1.4 Menu Items"

### 3.2 Menu in On-line Mode

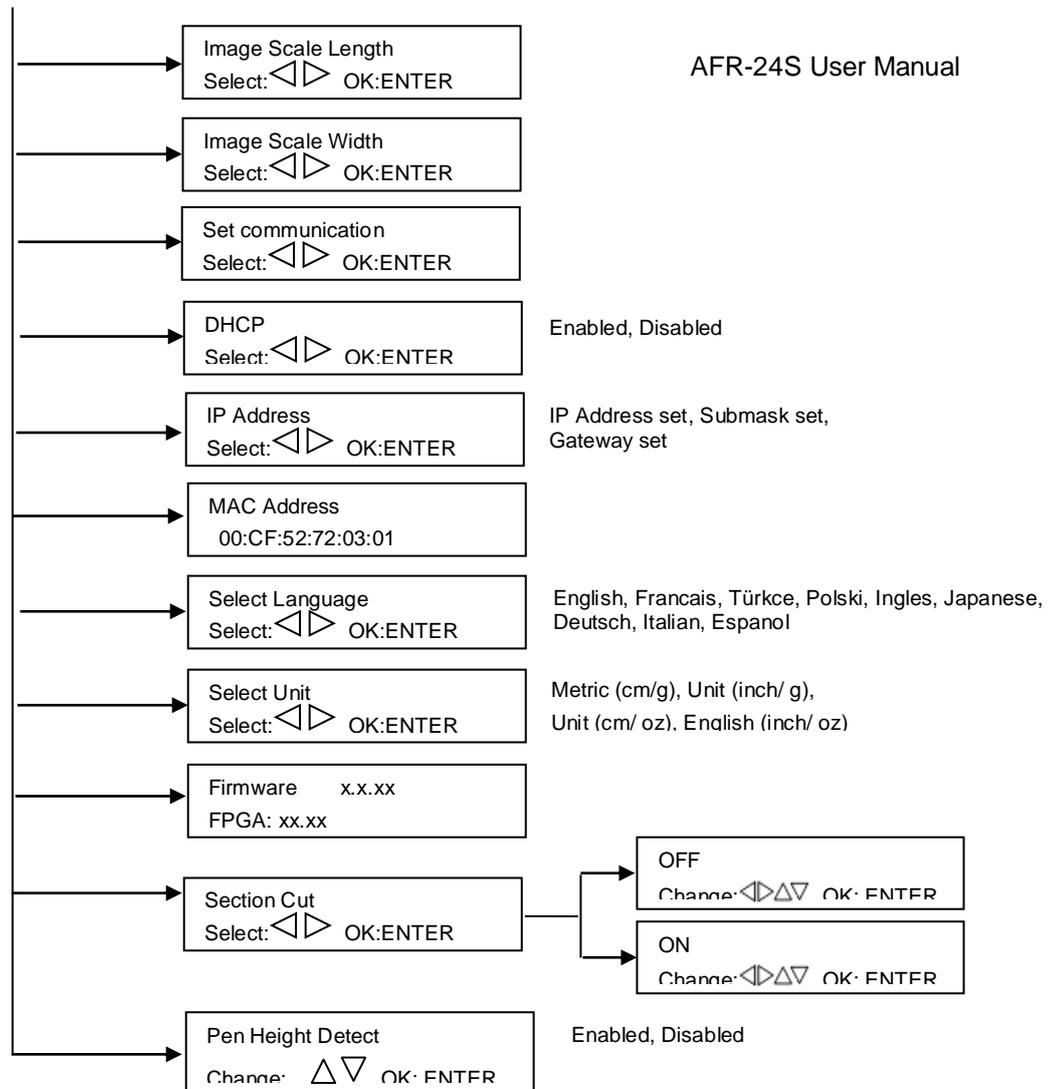


### 3.3 Menu in Off-line Mode





[ MISC ]



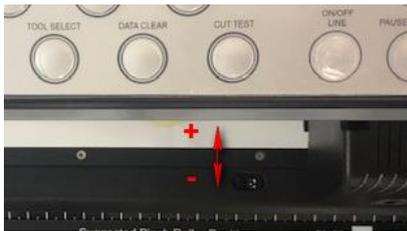
### 3.4 Menu Items

Below describes the functions of menu items

| Menu or Key                 | Function  | Setting                       | Default |
|-----------------------------|---|-------------------------------|---------|
| <b>--- Media sizing ---</b> |   |                               |         |
| Roll                        | To measure media width.   | Maximum Media Length 150M     |         |
| Edge                        | To measure media width and pull the media back till the front paper sensor open.  | Maximum Media Length 150M     |         |
| Single                      | To measure media width and length.  | Maximum Media Length 10M      |         |
| <b>--- POWER ---</b>        |   |                               |         |
|                             | To indicate the power status.   |                               |         |
| <b>[ Arrow Keys ]</b>       |   |                               |         |
|                             | 1. To move the tool carriage position on X or Y axis.<br>2. To select functions or change values of settings.   |                               |         |
| <b>[ ENTER ]</b>            |   |                               |         |
|                             | 1. The displayed parameters will be saved automatically.<br>2. To set a new origin at the present tool carriage position.<br><br>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. |                               |         |
| <b>[ PAUSE/RESUME ]</b>     |   |                               |         |
|                             | To temporarily halt the cutting process.<br>To resume the process by press [Pause/Resume] key again.  |                               |         |
| <b>[ ONLINE/OFFLINE ]</b>   |   |                               |         |
|                             | 1. To switch between online mode and offline mode.<br>2. To stop the cutting job or abort the change of setting.<br><br>Once press this key, the cutting job will be terminated immediately and cannot be resumed.  |                               |         |
| <b>[ OFFSET ]</b>           |   |                               |         |
|                             | To set or modify the distance between the blade tip and the center axis. Through left or right arrow keys, users can select the blade used (Red, Green, Yellow, Blue, Black capped blade or Pen) then adjust the offset values after pressing Enter if necessary  | 0.000~1.000mm                 | 0.275mm |
| <b>[ FORCE ]</b>            |   |                               |         |
| C Force                     | To set or modify the value of cutting blade force.<br><br>When the cutting force exceeds 450g, the maximum cutting speed would be 15 cm/sec and the cutting quality would be Small Letter Mode and while the cutting force is 300g-449g,  | 5~600gram;<br>5 gram/per step | 80 gram |

|                     |   |  |          |
|---------------------|---|--|----------|
|                     | the maximum cutting speed would be 30 cm/sec and the cutting quality would be Fine Mode.  |  |          |
| P Force             | To set or modify the value of pen force.<br><br>When the pen force exceeds 450g, the maximum pen speed would be 15 cm/sec and the pen quality would be Small Letter Mode and while the cutting force is 300g-449g, the maximum pen speed would be 30 cm/sec and the cutting quality would be Fine Mode.                             | 5~600gram;<br>5 gram/per step                                    | 80 gram  |
| <b>[ SPEED ]</b>    |   |  |          |
| C Speed             | To set or modify cutting blade speed at horizontal moving.<br><br>When the cutting speed exceeds 72 cm/sec, the cutting quality would be Normal Mode.   | 3~153cm/sec;<br>3cm/sec per step                                 | 72cm/sec |
| P Speed             | To set or modify pen speed at horizontal moving.  | 3~153cm/sec;<br>3cm/sec per step                                 | 72cm/sec |
| Up Speed            | To set or modify both cutting blade and pen speed at vertical moving.   | 3~153cm/sec;<br>3cm/sec per step                                 | 72cm/sec |
| AAS Speed           | To set or modify AAS detecting speed.   | High, Medium,<br>Low   | Medium   |
| C Quality           | To set or modify cutting quality (acceleration).<br>Draft (4.2G), Fair (2.8G), Normal (1.4G), Fine (0.7G), Small Letter (0.2G).<br><br>While cutting small letter, set as "Small letter".<br>While cutting in high speed, set as "Draft".<br><br>For normal operation, set as "Normal".   | Draft, Fair,<br>Normal, Fine,<br>Small Letter                    | Normal   |
| P Quality           | To set or modify plotting quality (acceleration).<br>Draft (4.2G), Fair (2.8G), Normal (1.4G), Fine (0.7G), Small Letter (0.2G).<br><br>While cutting small letter, set as "Small letter".<br>While cutting in high speed, set as "Draft".<br><br>For normal operation, set as "Normal".  | Draft, Fair,<br>Normal, Fine,<br>Small Letter                    | Normal   |
| <b>[ CUT TEST ]</b> |   |  |          |
| Square Cut          | To perform a cutting test at present blade position.<br>For more information, please refer to "4.3 Adjusting the Cutting Force and Offset" to adjust blade force and cutting speed.   |  |          |
| Redo Jobs in Memory | To redo the cut test jobs saved in memory by recutting or producing cut test copies   | Recut (number of jobs: 1-99)<br><br>Copy (number of jobs: 1-999) | Recut    |
| Repeat AAS Job      | To repeat AAS jobs automatically without having to operate on the computer side.<br><br>Please be noted that this feature is mainly applied to the Single paper mode; please ensure a new piece of material you wish to apply this feature on is loaded and the origin repositioned to the first registration mark before starting. |  |          |

|                        |  |  |                |
|------------------------|--|--|----------------|
|                        | When the first AAS job repeat completes, the user will be offered the choice of “Repeat AAS Job Again”, please press “Online/Offline” to return to the main menu.  |  |                |
| Blade Length Adjust    | <p>To adjust the length of the blade</p> <p>Note:</p> <ol style="list-style-type: none"> <li>5. Keep your blade length as 0 before you start adjusting.</li> <li>6. Test the blade holder first and then test the blade length by pressing ENTER.</li> <li>7. Keep the blade holder at the same position when you perform blade holder and blade length tests.</li> <li>8. 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.</li> </ol> <p>EG, Turn CW 0.5 is telling you that you should turn the knob for half a circle clockwise.</p> <ol style="list-style-type: none"> <li>9. The value on the screen will be 0.0 when the blade length is perfect and no more adjustment needs to be made. You will be prompted with the message below: Adjustment completes and you may start cutting at this point.</li> </ol> | 0.00mm-5.00mm  | 0.00mm         |
| Ratio Setting          | To adjust the size of the pattern.   | 100%, 200%, 300%, 400%   | 100%           |
| Pattern Setting        | <p>To provide two patterns for cut test</p> <p>Note: It is recommended to select “Cross” if you are working on thick pieces of materials.</p>  | “Arrow” and “Cross” patterns   | “Arrow”        |
| <b>[ DATA CLEAR ]</b>  |  |  |                |
|                        | To clear up buffer memory.   |  |                |
| <b>[ TOOL SELECT ]</b> |  |  |                |
| Save Parameter         | <p>To save pattern(s) of cutting parameters for later use.</p> <p>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.</p>   | <p>Pattern 1:<br/>vinyl</p> <p>Pattern 2:<br/>window tint</p> <p>Patterns 3 &amp; 4:<br/>default value which could be adjusted if needed</p> | Patterns 3 & 4 |
| Set Smoothing Cut      | To enable smooth-cutting function.   |  | Enable         |

|                      |   |                                  |                      |
|----------------------|---|----------------------------------|----------------------|
| Over Cut             | To generate an overcut to facilitate weeding.   | 0.00mm-1.00mm<br>0.05mm/per step | 0.00mm               |
| Set Tangential Mode  | To enable the tangential-cutting mode for thicker media types and small letter cuts.<br>Note: while the Offset value setting at 0.000 mm, "Set Tangential Mode" will automatically be disabled.   |                                  | Enable               |
| Pouncing             | To make perforated patterns.<br><br>* In order to use this function, Pouncing tool must be installed.<br><br>* Before start pouncing, place pouncing strip on top of the cutting pad to protect the cutting pad.<br><br>* Set the value as 0 mm to disable the pouncing mode.<br><br>* Pouncing tool is an optional item.   | 0~200mm                          | 0mm                  |
| Panel Setup          | Accept setup command:<br><br>To accept commands of the Force, Speed, Cutting Quality, and Offset only via software.   |                                  | Accept setup command |
|                      | Control panel only:<br><br>To accept commands of the Force, Speed, Cutting Quality, and Offset only via control panel of the cutter.  |                                  |                      |
| Factory Default?     | To turn all parameters of the menu items to factory-default settings.   |                                  |                      |
| <b>[ MISC ]</b>      |   |                                  |                      |
| Auto Unrolled Media  | To avoid paper jam and motor crash by automatically unroll media (50cm and up) before cutting while enabled. .<br><br>* Auto-unroll only effects on roll/edge media.<br><br>* Using Single mode to size media will disable this function automatically.<br><br>* 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.   |                                  | Enabled              |
| Auto Unrolled Length | When "auto unrolled media" is enabled, user can adjust the unrolled media length.   | 500~3000mm                       | 3000mm               |
| Auto Unrolled Speed  | To adjust the unrolled media speed.   | Slow, Normal, Fast               | Normal               |
| Adjust Paper         | To define the position where a paper sheet is loaded to the work area.<br><br>If the value of Adjust paper is bigger, the sheet media loaded to work area will be backward<br><br><br><br>This setting only works when using cutter with auto feeder, or under single mode when using cutter alone.<br><br>(*auto feeder is an optional item for Jaguar-61 and RXII-61-Creasing) | -40 ~ 40mm                       |                      |

|                                |   |  |  |
|--------------------------------|---|--|--|
| Rear Paper Sensor              | <p>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.</p> <p>Note: Rear paper sensor only functions under “Roll” and “Edge” mode.</p>   | Enable<br>Disable                              | Enable   |
| AAS Detect Mode                | <p>To recognize the printed sheet media is fed in forward direction or reversed direction by detecting the registration marks.</p> <ol style="list-style-type: none"> <li>1. Forward direction: to detect the registration marks in forward media feeding direction</li> <li>2. Auto detection: to distinguish the media feeding direction automatically by detecting the registration marks.</li> </ol> <p>Reverse direction: to detect the registration marks in reversed media feeding direction</p> |  |  |
| Sizing Setting                 | <p>Allows user to set the sizing settings.</p> <p>If set to user defined mode, the user will be asked to select the size setting every time the machine is turned on.</p> <p>If set to Default Edge or Roll, Edge or Roll type sizing will be performed whenever the machine is turned on.</p>  | User Defined,<br>Default EDGE,<br>Default ROLL | User Defined   |
| Vacuum                         | <p>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.</p>   | Enable, Disable                                | Enable   |
| First Back to Origin           | <p>To enable the carriage back to the previous origin; when “Enable” is selected, the carriage will not go back to the previous origin while the selection of “Disable” allows the carriage to do so.</p>   | Enable<br>Disable                              | Enable   |
| AAS Copy                       | <p>To enable the AAS copy. When “Enable” is selected, the AAS module will continue to read the registration mark to contour cut. Users can set distance between images and AAS copy times in this function. The range of distance is 0-500mm, and the range of times is 0-1000.</p>   | Enable<br>Disable                              | Enable   |
| AAS Offset/<br>AAS Ext. Offset | <p>To set or modify AAS offset value.</p> <p>You can refer to “5.3 Printer Test” for more details.</p> <p>Adjust the offset value under AAS Offset menu when a regular blade holder is installed; adjust the offset value under AAS Ext. Offset menu when an extension holder is installed.</p>   |  | AAS Offset:<br>X:0, Y:0<br><br>AAS Ext.<br>Offset:<br>X:8.5, Y:3 |
| Paper Saving Mode              | <p>To save media by four different modes:</p> <ol style="list-style-type: none"> <li>1. Length expanded mode</li> <li>2. Width expanded mode</li> <li>3. Both expanded mode</li> <li>4. Both unexpanded mode</li> </ol>   |  | Length expanded mode   |
| Pen_Blade Offset               | <p>Correct the gap between the pen and cutter mounted on the carriage.</p> <ol style="list-style-type: none"> <li>1. Press the arrow keys to move the cursor to the position you want to plot, finishing settings press “Enter” key to next step.</li> <li>2. If the pen and cutter lines are not matched, please refer to the table below for adjust X and Y values in “Pen overlap Cut”</li> </ol>  |  |  |

|                      | <p>option.<br/>Press ← and → key switch X and Y direction.</p> <table border="1" data-bbox="379 280 774 660"> <thead> <tr> <th>Directions</th> <th>Status</th> <th>Key</th> </tr> </thead> <tbody> <tr> <td rowspan="2">X</td> <td></td> <td>ⓐ</td> </tr> <tr> <td></td> <td>ⓑ</td> </tr> <tr> <td rowspan="2">Y</td> <td></td> <td>ⓐ</td> </tr> <tr> <td></td> <td>↓</td> </tr> </tbody> </table> <p>Black line: pen line, Red line: cut line</p>   | Directions       | Status                         | Key              | X                               |  | ⓐ                                |  | ⓑ                              | Y                |  | ⓐ                |  | ↓                 |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
|----------------------|--|------------------|--------------------------------|------------------|---------------------------------|---|----------------------------------|---|--------------------------------|------------------|---|------------------|---|-------------------|---------------------------------|-------------------|----------------------------------|-------------------|-----------------------------------|-------------------|---------------------------------|-------------------|----------------------------------|--|--|
| Directions           | Status   | Key              |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| X                    |   | ⓐ                |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
|                      |   | ⓑ                |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| Y                    |   | ⓐ                |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
|                      |   | ↓                |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| Scale Width          | Fixed scaling, for maintenance only.   |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| Scale Length         |  |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| Image Scaling Width  | <p>To adjust the image scale of media length and width that may cause by the thickness of the media.</p>   |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| Image Scaling Length | <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> <ol style="list-style-type: none"> <li>1. Press the [LEFT ARROW] to choose the Numerator and select 500.0 mm,</li> <li>2. Cut the length by sending a graph file,</li> <li>3. Measure the length then use the [RIGHT ARROW] key to choose the Denominator, then</li> <li>4. Press [UP ARROW /DOWN ARROW] to change the values of the actual length.</li> </ol>  |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 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.<br/><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> <table data-bbox="375 1545 1037 2049"> <tbody> <tr> <td>9600, n, 7, 1, p</td> <td>9600pbs, 7 Bits with NO Parity</td> </tr> <tr> <td>9600, o, 7, 1, p</td> <td>9600pbs, 7 Bits with ODD Parity</td> </tr> <tr> <td>9600, e, 7, 1, p</td> <td>9600pbs, 7 Bits with EVEN Parity</td> </tr> <tr> <td>9600, n, 8, 1, p</td> <td>9600pbs, 8 Bits with NO Parity</td> </tr> <tr> <td>9600, o, 8, 1, p</td> <td>9600pbs, 8 Bits with ODD Parity</td> </tr> <tr> <td>9600, e, 8, 1, p</td> <td>9600pbs, 8 Bits with EVEN Parity</td> </tr> <tr> <td>19200, n, 7, 1, p</td> <td>19200pbs, 7 Bits with NO Parity</td> </tr> <tr> <td>19200, o, 7, 1, p</td> <td>19200pbs, 7 Bits with ODD Parity</td> </tr> <tr> <td>19200, e, 7, 1, p</td> <td>19200pbs, 7 Bits with EVEN Parity</td> </tr> <tr> <td>19200, n, 8, 1, p</td> <td>19200pbs, 8 Bits with NO Parity</td> </tr> <tr> <td>19200, o, 8, 1, p</td> <td>19200pbs, 8 Bits with ODD Parity</td> </tr> </tbody> </table> | 9600, n, 7, 1, p | 9600pbs, 7 Bits with NO Parity | 9600, o, 7, 1, p | 9600pbs, 7 Bits with ODD Parity | 9600, e, 7, 1, p  | 9600pbs, 7 Bits with EVEN Parity | 9600, n, 8, 1, p  | 9600pbs, 8 Bits with NO Parity | 9600, o, 8, 1, p | 9600pbs, 8 Bits with ODD Parity   | 9600, e, 8, 1, p | 9600pbs, 8 Bits with EVEN Parity  | 19200, n, 7, 1, p | 19200pbs, 7 Bits with NO Parity | 19200, o, 7, 1, p | 19200pbs, 7 Bits with ODD Parity | 19200, e, 7, 1, p | 19200pbs, 7 Bits with EVEN Parity | 19200, n, 8, 1, p | 19200pbs, 8 Bits with NO Parity | 19200, o, 8, 1, p | 19200pbs, 8 Bits with ODD Parity |  |  |
| 9600, n, 7, 1, p     | 9600pbs, 7 Bits with NO Parity   |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 9600, o, 7, 1, p     | 9600pbs, 7 Bits with ODD Parity  |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 9600, e, 7, 1, p     | 9600pbs, 7 Bits with EVEN Parity   |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 9600, n, 8, 1, p     | 9600pbs, 8 Bits with NO Parity   |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 9600, o, 8, 1, p     | 9600pbs, 8 Bits with ODD Parity  |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 9600, e, 8, 1, p     | 9600pbs, 8 Bits with EVEN Parity   |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 19200, n, 7, 1, p    | 19200pbs, 7 Bits with NO Parity  |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 19200, o, 7, 1, p    | 19200pbs, 7 Bits with ODD Parity   |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 19200, e, 7, 1, p    | 19200pbs, 7 Bits with EVEN Parity  |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 19200, n, 8, 1, p    | 19200pbs, 8 Bits with NO Parity  |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |
| 19200, o, 8, 1, p    | 19200pbs, 8 Bits with ODD Parity   |                  |                                |                  |                                 |   |                                  |   |                                |                  |   |                  |   |                   |                                 |                   |                                  |                   |                                   |                   |                                 |                   |                                  |  |  |

|                    |   |                                    |                 |
|--------------------|---|------------------------------------|-----------------|
|                    | 19200, e, 8, 1, p 19200pbs, 8 Bits with EVEN Parity   |                                    |                 |
| DHCP               | Shows your IP address for TCP/IP Configuration  |                                    | Disable         |
| IP Address         | Shows the IP Address of your cutting plotter.   |                                    |                 |
| MAC Address        | Shows the MAC Address of your cutting plotter.  |                                    |                 |
| Select Language    | To select displayed languages on LCM panel in English, Spanish, Italian, Deutsch, Japanese, Portuguese, Polish, Turkish or French.  |                                    | English         |
| Select Units       | Provide four-unit systems for users convenient.   | cm/s; inch/oz;<br>cm/oz; inch/gram | Metric          |
| Firmware Version   | To display the version number of Firmware and FPGA code, varying from model to model  |                                    |                 |
| Section Cut        | To divides the long plot data into sectional output jobs to gain higher cutting quality and increase precision.<br><br>Users can set the section by registration marks or input the value manually.                 |                                    | 200mm intervals |
| Pen Height Detect  | To detect the height of pen automatically   |                                    |                 |
| <b>[ CUT OFF ]</b> |   |                                    |                 |
| Cut off Paper      | To cut off the material automatically when the job is completed, you need to use the arrow keys to move the carriage to the position you want to cut off the material manually and then press the “cut off” button. |                                    |                 |

## Chapter 4 Operation

### 4.1 How To Load The Sheet Media Into The Auto Feeder

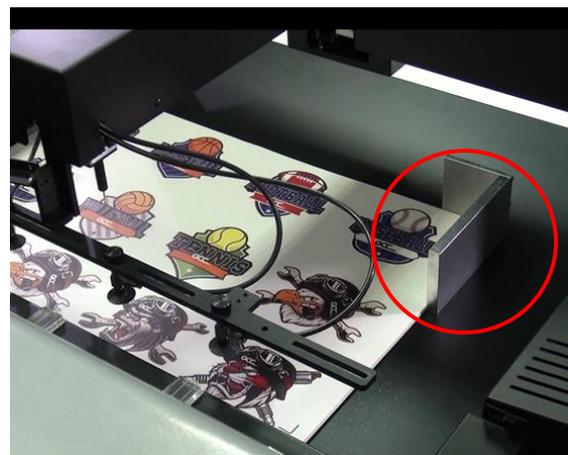
**Step 1** Place the sheet media flat on the stack of the feeder and adjust the pinch roller to proper position according the media size.

#### NOTE :

1. Make sure the sheet media is flat to avoid any fail to load into machine for the curved media
2. A laminated media is requested while using in the auto feeder. Otherwise, it may probably fail to be adsorbed by suction cup due to the air leaking.



**Step 2** Put the L-type media blocks to touch the rear edge of the sheet media.



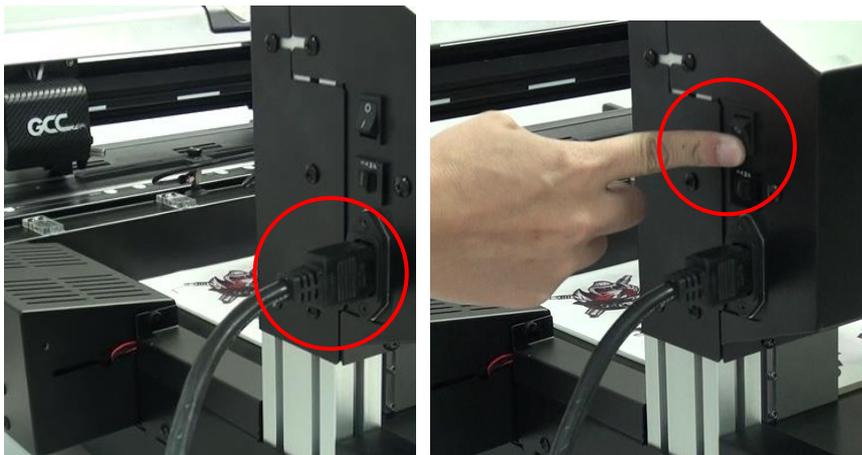
**Step 3** Adjust the pinch roller to proper position according to the media size. The alignment label provides a quick view of the suggested position of pinch rollers for different media sizes.



**Step 4** Use a RS232 cable to connect the feeder and cutter.



**Step 5** Plug in the power cable and turn on the power.



**Step 6** Power on the cutter.



**Step 7** Lower down the lever to raise the pinch roller.



**Step 8** Press "ENTER" key to start media width sizing.



**Step 9** Go to "MISC" menu, use arrow left/right keys to select "Adjust Paper" and press "ENTER" key. Set the "Adjust Paper" to 22.5mm and press "ENTER" key to confirm.

Offline For System Setup

**[MISC]**

Adjust Paper      22.5 mm

Select: ◀▶      OK: ENTER

**Note:** “Adjust paper” is to calibrate position of media front edge after sizing.

If the value of Adjust paper is bigger, the distance of the media front edge will be closer to cutting blade.



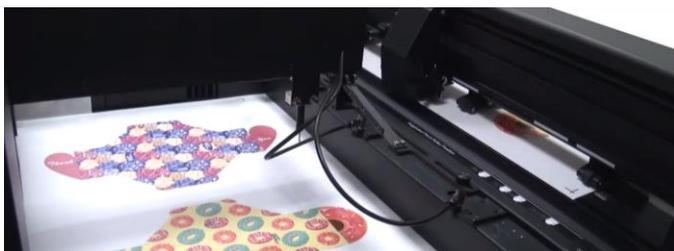
**Step 10** Use arrow left/right keys to select “AAS copy” and press “ENTER” key .



**Step 11** Then use arrow up/down keys to define the repeated value (value = 0- 500) and press “ENTER” key.



**Step 11** Send the job from your computer and the cutter with feeder will perform the automated cutting process.



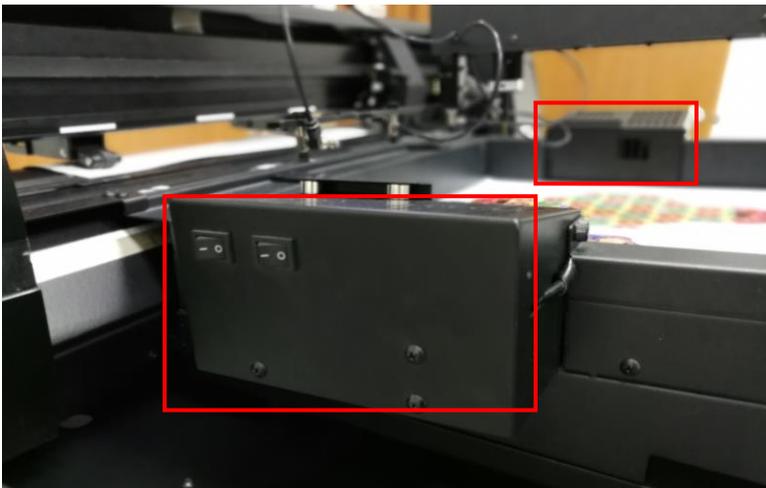
### 4.1.1 Automatic Working Procedure

1. Pick up the media from tray to load it into the cutter



**NOTE:**

Blowers installed on both side of media tray will automatic turn on while the media is ready to be picked up to separate the media. You can control the air volume by turning off the fans according to the media type.

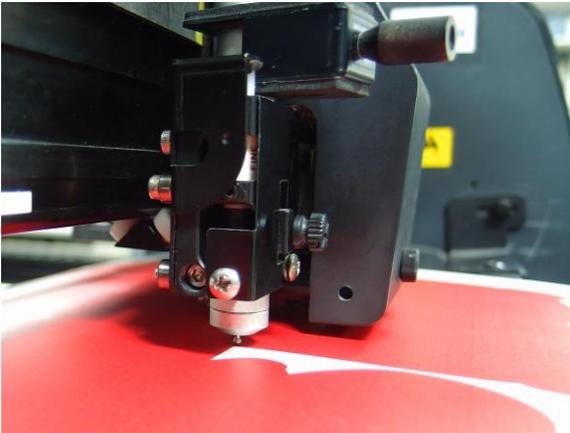


2. AAS II will detect the registration mark after sizing the media



3. Start the creasing job

**NOTE:** Only available while you set the creasing function in software (Please refer to **4.6.2 RX II-Creasing Print Driver setting > Creasing Page**) )



4. After completing the creasing, it will come to cut directly.

**NOTE:** It is suggested to use die cut/ kiss cut function instead of regular cutting in order to achieve good quality output on paper box application.

5. Collecting the media once completing the job



#### 4.1.2 Back Creasing

In order to prevent the printed image scratching during creasing process, creasing and cutting from the back of printed paperboard is the best solution that can keep the printed image in a perfect condition.

The operation for setting the AAS function in cutter software for back creasing function is the same as printing out the printed image with registration mark on the front side.

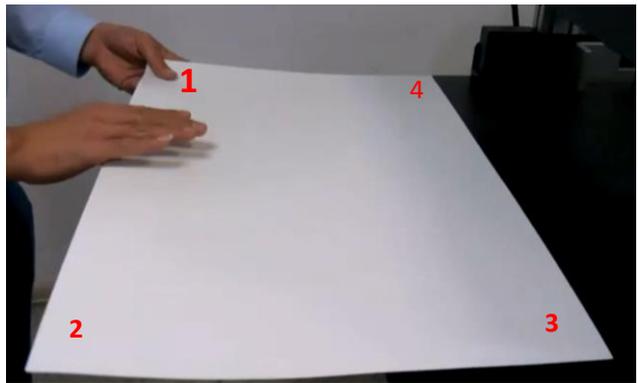
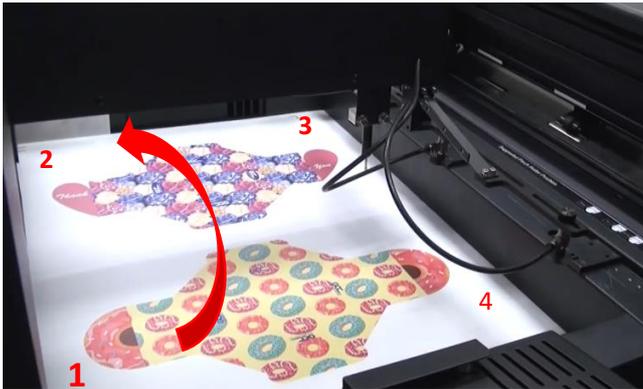
(For step-by-step instructions, please refer to the chapters: 08\_A-3 CorelDraw Plug-In, 08\_A-4 Illustrator Plug-In, 08\_A-5 GreatCut Plug-In.)

It is unnecessary to print the registration mark again on the back side. AAS will automatically detect the paper edge and calculate the distance from the printed image to the paper edge to identify the location of printed image.

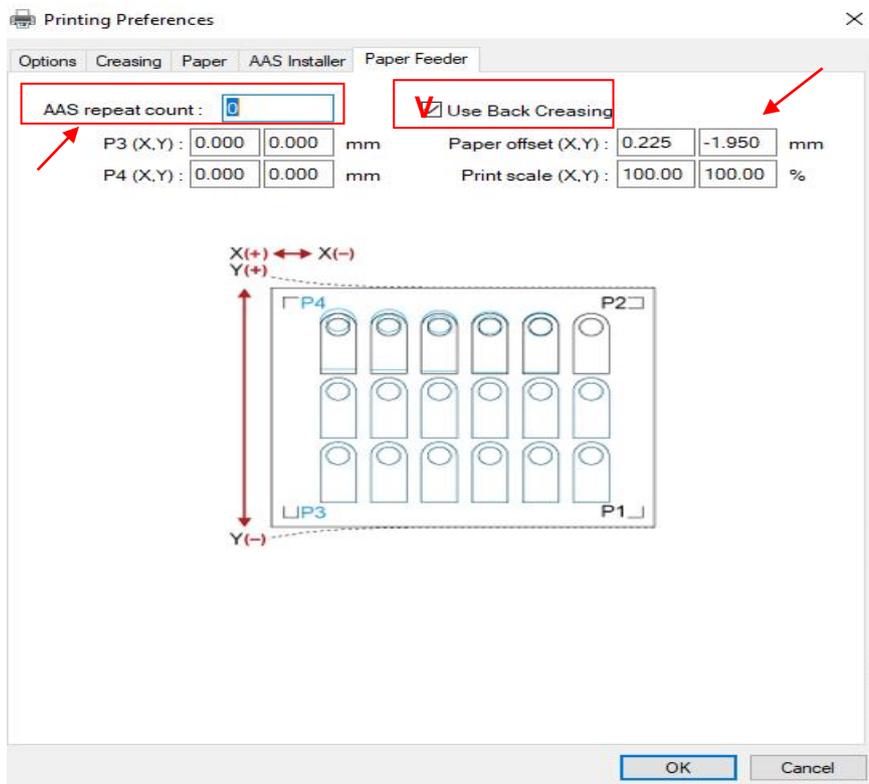
Please follow the instruction of the operation as below:

**Step 1** Flip the printed paperboard in mirror direction from right to left side.

**【NOTE】** Please don't flip the paperboard from front to back side.



**Step 2** Please go to the **Paper Feeder** page in GCC driver and select **“Use Back Creasing”** function and adjust the **“paper offset”** by setting X and Y value (X = length, Y=width)



**【Note】**

1. “Print Scale” function is requested to adjust when printing scale not 100%
2. If you have set AAS repeat times from Control Panel, you don't need to set it again from driver. Otherwise, machine will do the repeat job according to the setting in driver.

## 4.2 How To Load The Sheet Media Into Machine Without Auto Feeder

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

### Step 1

Use the lever on the upper right side of the cutting platen to raise or lower down pinch rollers. Pull the lever forward until it makes a clicking sound then the pinch rollers are raised (Figure 4-1).

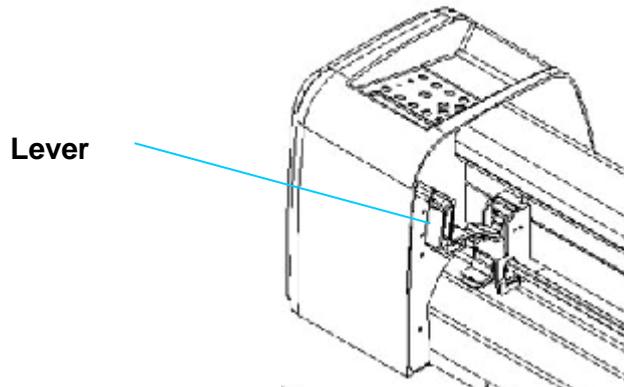


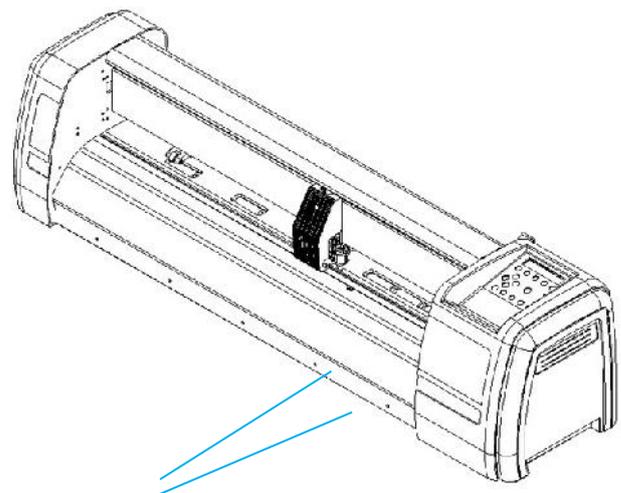
Figure 4-1

### 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 4-2) should be covered. Once the media covers the sensor, the cutting platen will size the media width and length automatically.

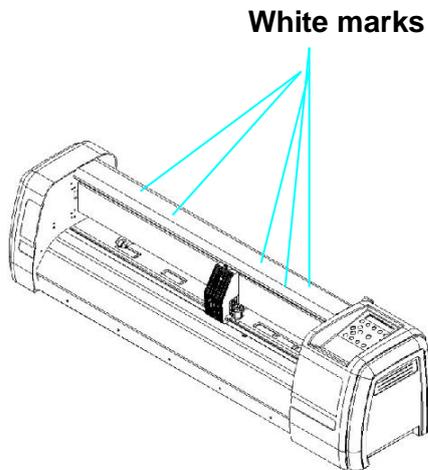


Paper sensors

Figure 4-2

**Step 3**

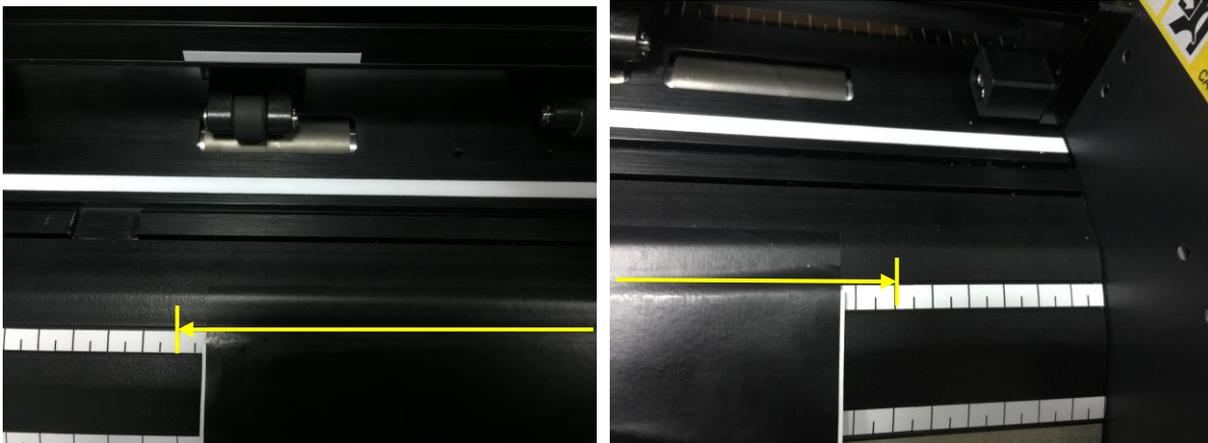
Then move the pinch rollers manually to the proper position. Be sure the pinch rollers must be positioned above the grid drum. The **white marks** on the top trail will remind you where the grid drums are (Figure 4-3).



**Figure 4-3**

**Step 4**

Place the media between the cutoff ranges.

**Step 5**

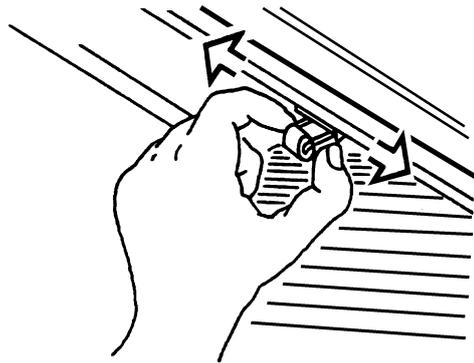
Push the lever backward to lower down the pinch rollers.

**Step 6**

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.

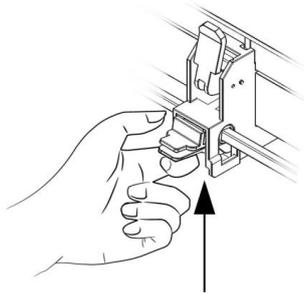


(X)  
Incorrect

Figure 4-4

**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 4-5

### 4.3 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.

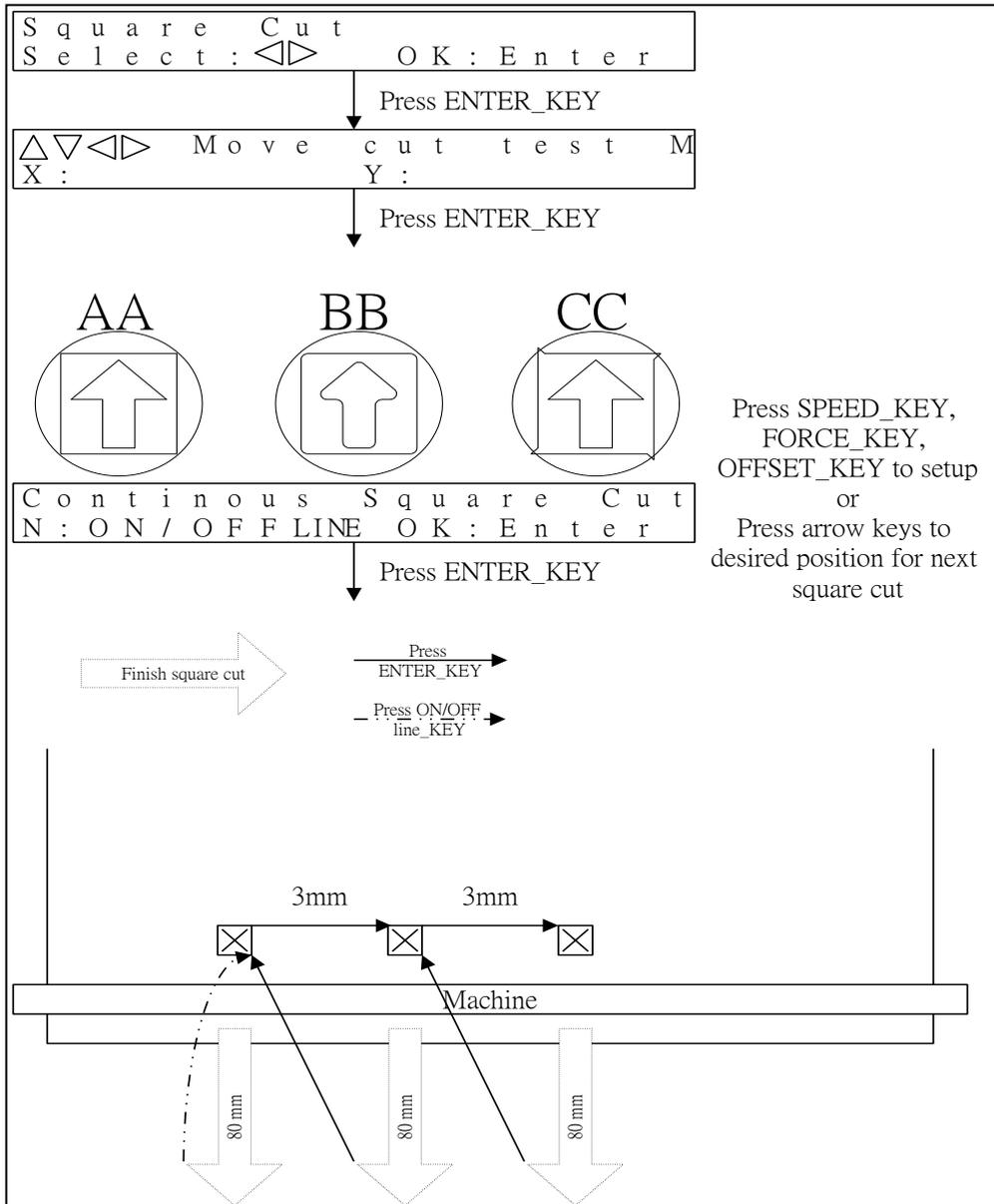


The default cutting force and offset value of the cutting test are 80gf and 0.275mm respectively. Press [ARROW KEY] to move the tool carriage to the position where you like. Then, press the [ENTER KEY] to perform Cut Test.

**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 4-14).

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



## 4.4 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

## 4.5 When Completing the Cutting Job

After completing the cutting job, raise the sheet-loading lever, and then remove the material or you can use the cutoff function.

### Cutoff Manually:

You can cut off the finished job by the Safe Blade (a standard accessory) along the knife guide. (Figure 4-17).

### Cutoff Automatically:

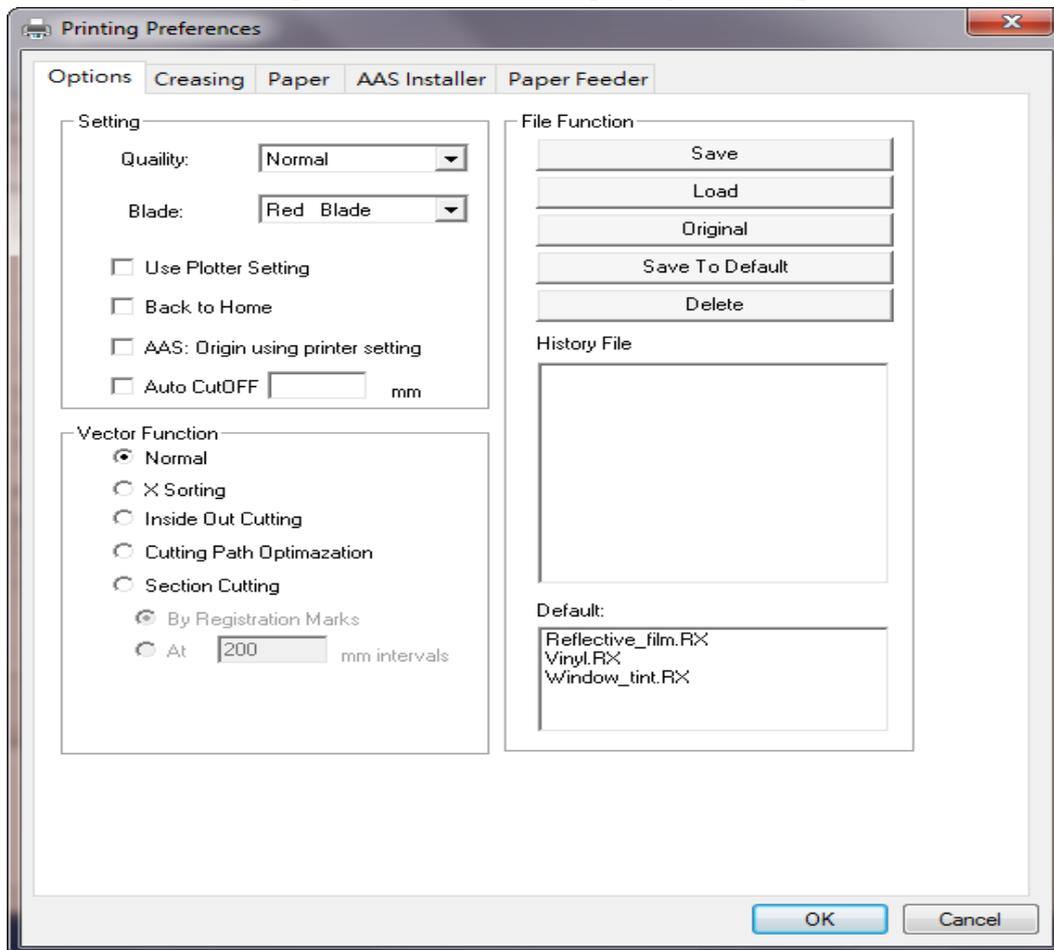
By using the installed cutoff blade in the carriage, you can move the carriage to the position you want and set the distance between the cutting image and the cut off line on GCC driver then press the "CUT OFF" button on the control panel. The material will be cut off automatically.



**Figure 4-17**

## 4.6 RX II-Creasing Print Driver setting

### 4.6.1 RX II-Creasing Print Driver setting > Option Page



**Setting:** You can adjust the following settings, depending on your application or results you would like to achieve.

#### Quality:

##### [Slower speeds / higher quality - Faster speeds / lower quality]

The Cutting Quality setting function allows you to adjust and balance vector mode's quality and speed settings based on your specific job. Draft Mode offers the highest output speed, sacrificing quality. Whereas Small letter Mode offers the highest quality, sacrificing output speed. Keep in mind that speed and quality are usually at a tradeoff.

#### Blade:

Choose the blade type used for this job.

#### Use Plotter Setting:

The parameter settings will be set according to those set from the control panel.

**Back to home:**

The carriage will return to the original position when this option is selected.

**Auto Cutoff:**

This feature allows users to set the cutter to cut off the media after the completion of each job making it easy to set up an unattended workflow for mass production. The material will be cut off automatically once you click the Auto Cut off function on GCC driver and set the distance between the cutting image and the cut off line.

The default is 10mm meaning the material will be cut off after 10mm of the image. The value for the cut off function is adjustable. You can set the value between 0mm-100mm depending on your need.

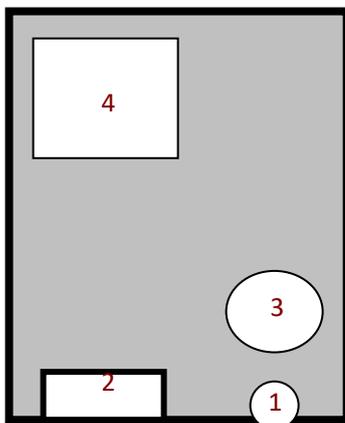
**Vector Function****1. Normal:**

This is the default Vector Function setting. The cutting order depends on the order of the graphics created in the application software.

**2. X sorting:**

The cutting order is based on the next closest object on the x-axis from the origin.

The cutting order of the sample below will be 1,2,3,4 (please refer to figure 4-20).



**Figure 4-19**

**3. Inside Out Cutting:**

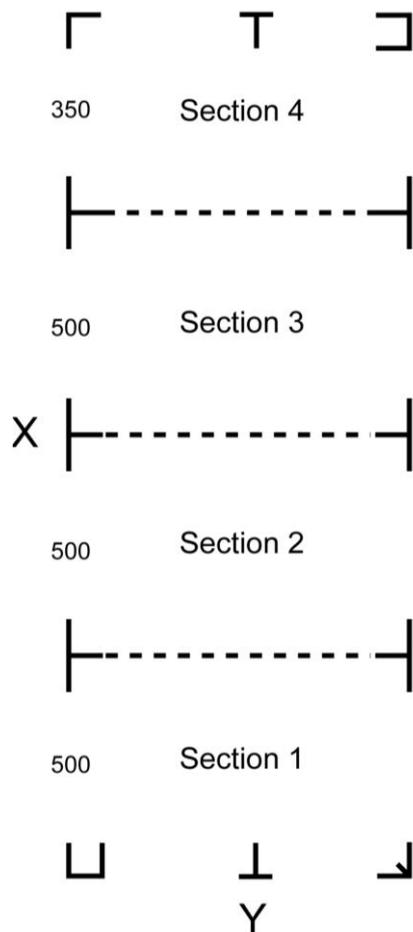
When performing a vector cutting job in which your image has one vector cut area enclosed within another vector cut area, select the Inside-out Sorting mode. This mode will automatically instruct the print driver to process the inside vector image and moving outwards. This setting will always automatically direct the cutter to cut from the inner most vector shape and move outwards.

#### 4. Cutting Path Optimization:

This is a setting that will minimize your process time. When selected, the print driver will analyze your image and automatically determine the most efficient processing path to process your image.

#### 5. Section Cutting:

Users can output long picture by section cutting which could make cutting more stable and get superior cutting quality. Users can set the section by registration marks or input the value manually. When cutting plotter finishing cutting in section 1, it will continue to cut in section 2. The picture is shown as below:



#### File Function (Option Page):

The file function section allows you to manage various cutter parameters. 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 RX II 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 file from the Custom Media section, it does not remove the .RX file from your hard drive, if you wish to completely remove the file from your hard disk, and you will have to manually delete the file from your operating system.

**Note:**

If you are using Windows 2000 or XP as your operating system, then make sure you login with an administrator or administrator-rights account in order to properly save cutter parameter settings.

#### 4.6.2 RX II-Creasing Print Driver setting > Creasing Page

The RX II series incorporates the use of 16 different colors to represent 16 different parameter settings including cutting speed, force and blade offset settings when cutting. These colors are referred to as "Tools". Think of each color as a designated cutter setting, rather than as a color. An image that is made up of black, red and blue colors will be processed using the cutter settings designated for each particular color. In order to utilize up to 16 different colors (cutter parameter settings), make sure your graphics software can recognize and utilizes the 16 colors designated by the GCC RX II series print driver (please refer to figure 4-21).

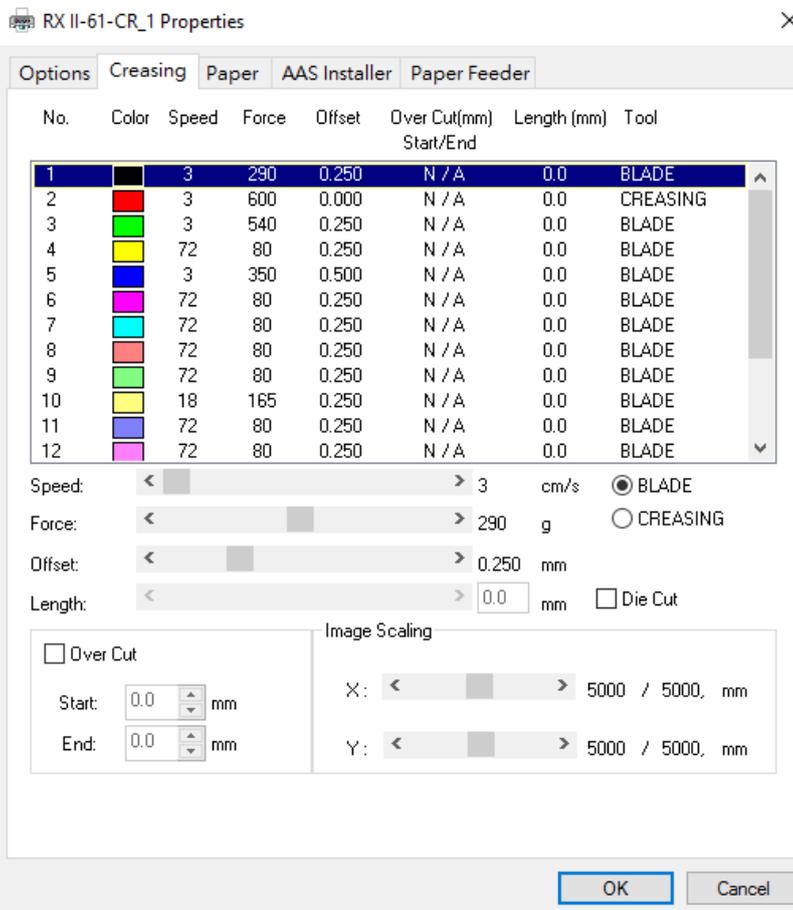
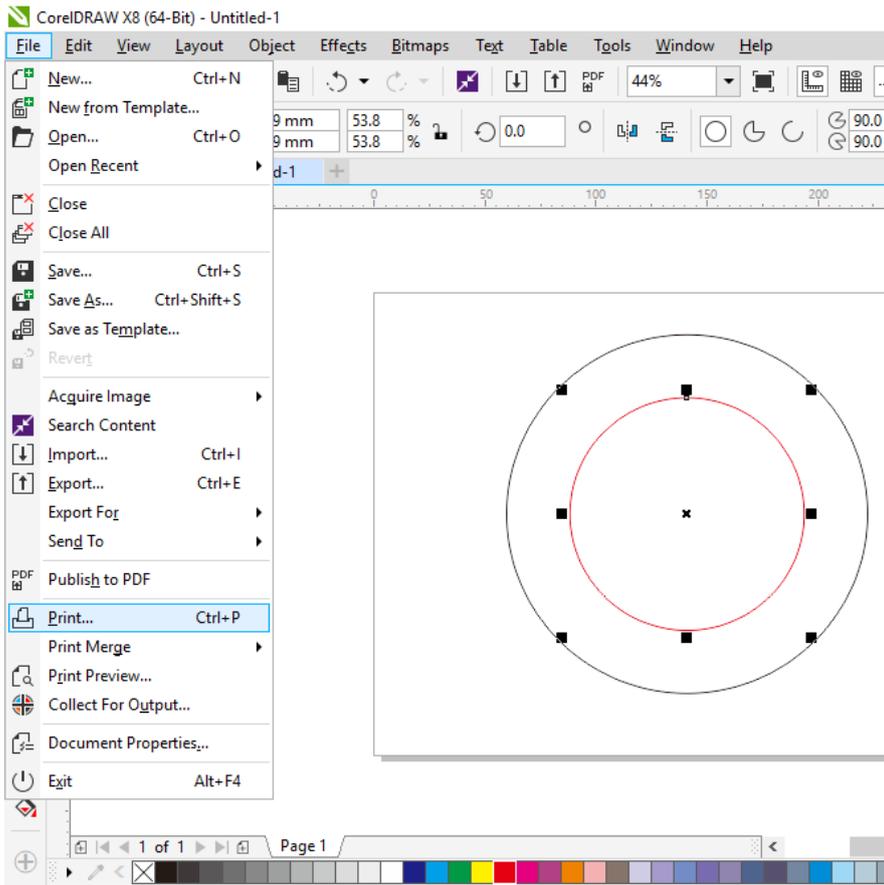


Figure 4-21

If you would like to specify your own colors to designate to a particular cutter setting, then all you have to do is to double-click on that particular color from the creasing menu and a color manager window will open where you can select “define custom colors” to define your own color (shown in the picture below). This is useful when your image is composed of colors that are not part of the creasing menu’s default color selection, and instead of modifying your image, you simply would like to assign the cutter settings based on the existing colors from your current image.

**Note:**  
 The GCC RX II series driver cannot store more than 16 colors or different cutter parameter settings per file.

You should set the **RGB color code** in the graphic design software such as CorelDRAW and Adobe Illustrator as same as Creasing page of print driver. That makes cutting plotter cut in right parameters. Please follow the step-by-step instruction blow.

1. Double-click the color you want to define, and press “Define Custom Colors” button.

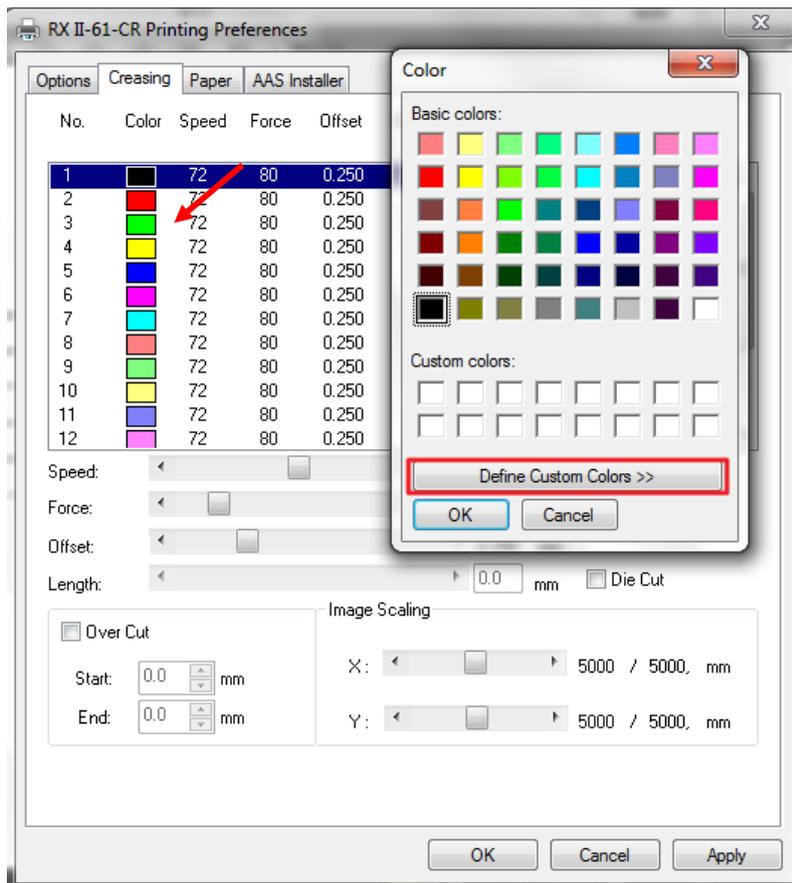
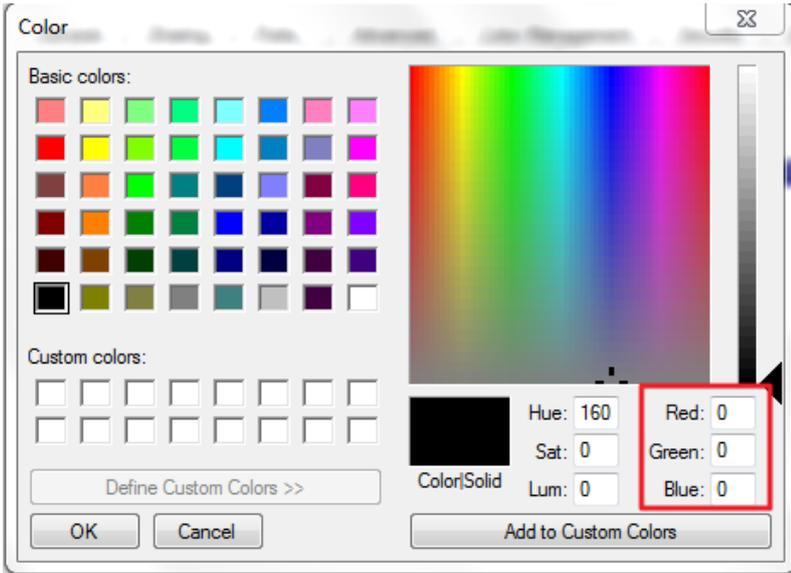
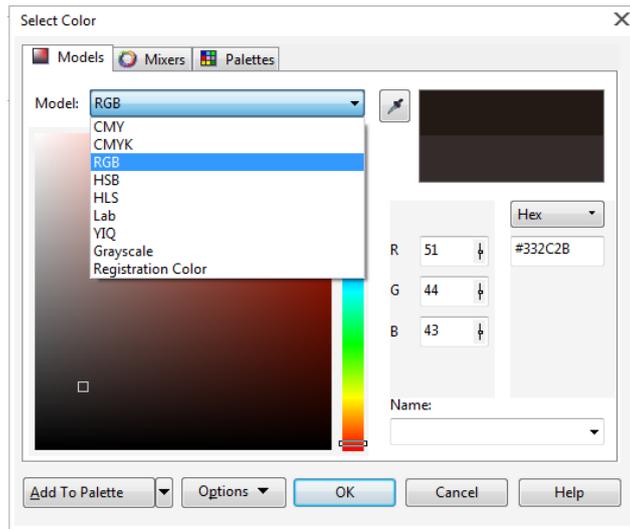
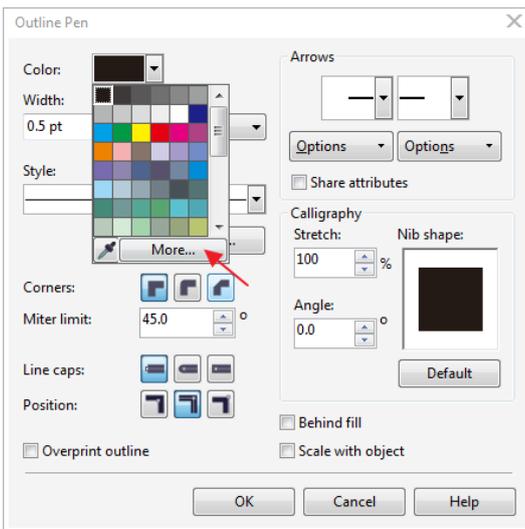


Figure 4-22

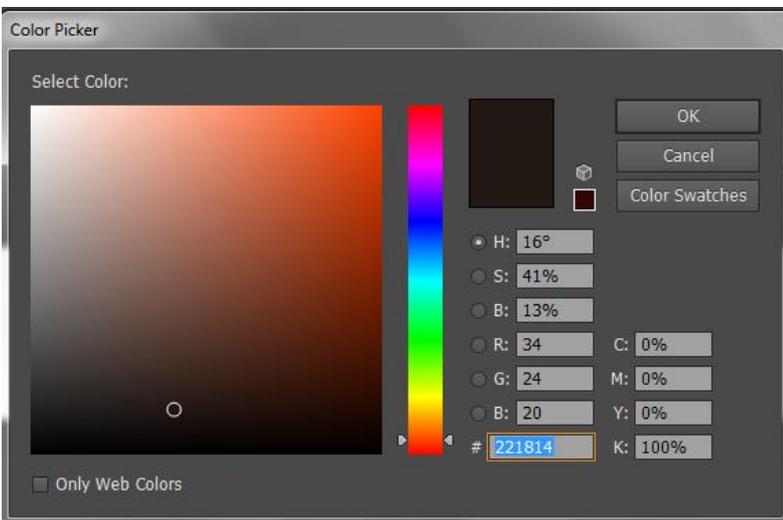
2. Remember the RGB code.



3. Open the Outline Pen Color, Click “More...” in the CorelDRAW and select RGB or open Color Picker in the Adobe Illustrator.



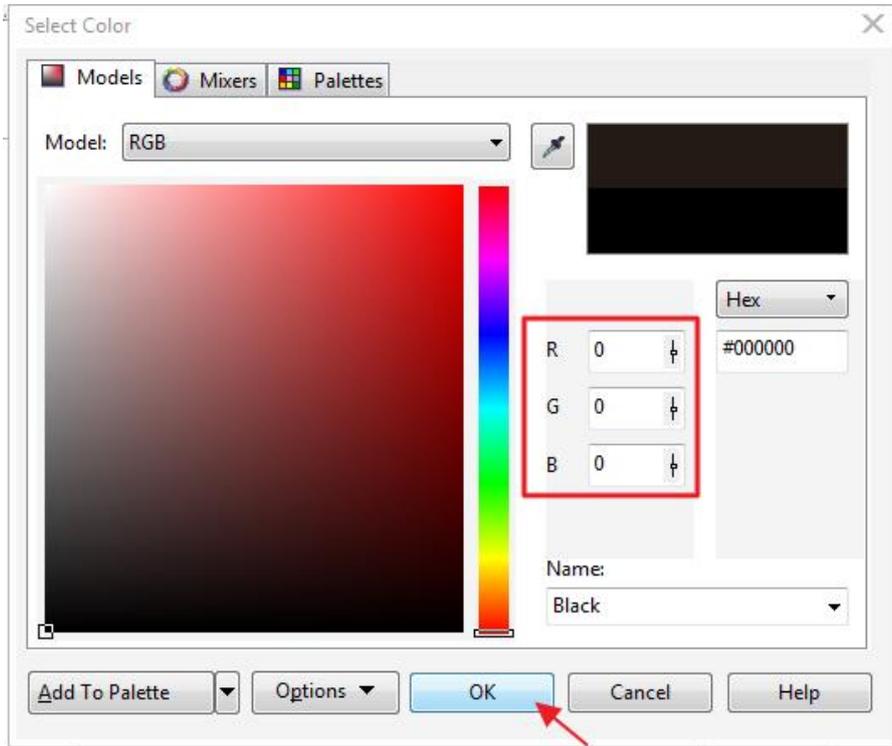
CorelDRAW



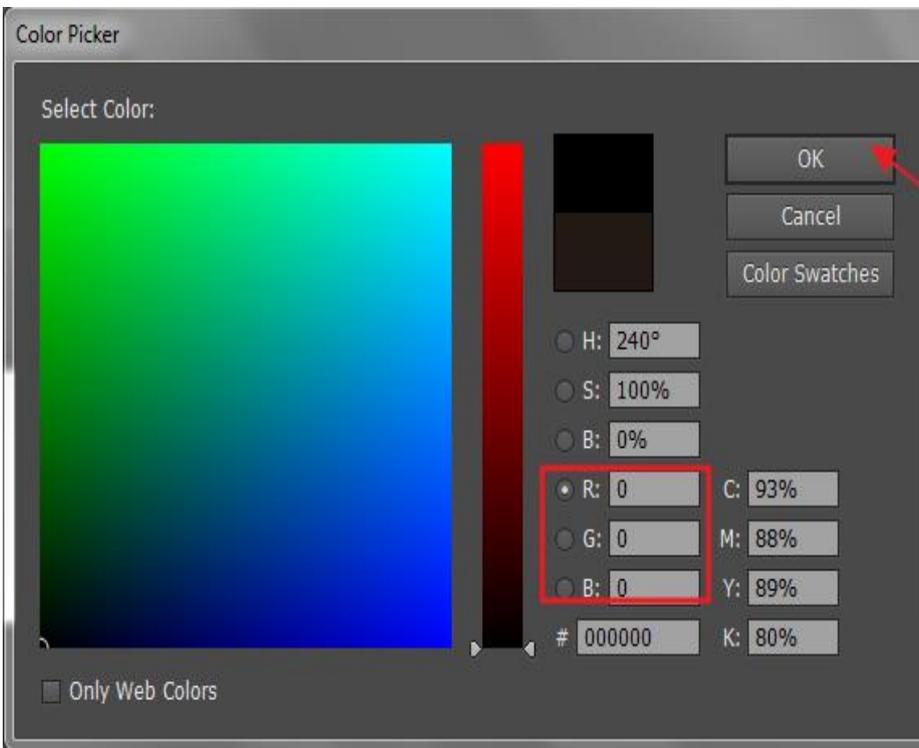
Adobe Illustrator

- 4. Set the RGB code in the CoreIDRAW or Adobe Illustrator as same as Print driver that makes cutting plotter cut in right parameters.

CoreIDRAW



Adobe Illustrator



**Speed (Creasing Page) [DEFAULT SETTING: 72cm/sec]**

The speed slider controls the cutter’s cutting speed during operation with a range setting from 3 – 153cm/sec. The GCC RX II series maximum cutting speed is 153 cm (60 inches) per second.

**Force (Creasing Page) [DEFAULT SETTING: 80g]**

The force slider controls the cutting force during operation with a range setting from 0 – 600g.

**Offset (Creasing Page) [DEFAULT SETTING: 0.25mm]**

The offset slider controls the blade offset depending on the blade you used.

**Die Cut (Creasing Page)**

The Die Cut function can allow you to cut through the backing of the material. You can only use the first 8 color for this function. If you choose Color No.1 and click the Die Cut function, the Color No.9 will become Color No.1\* for setting different parameter for the same cutting line. (Figure 4-24)

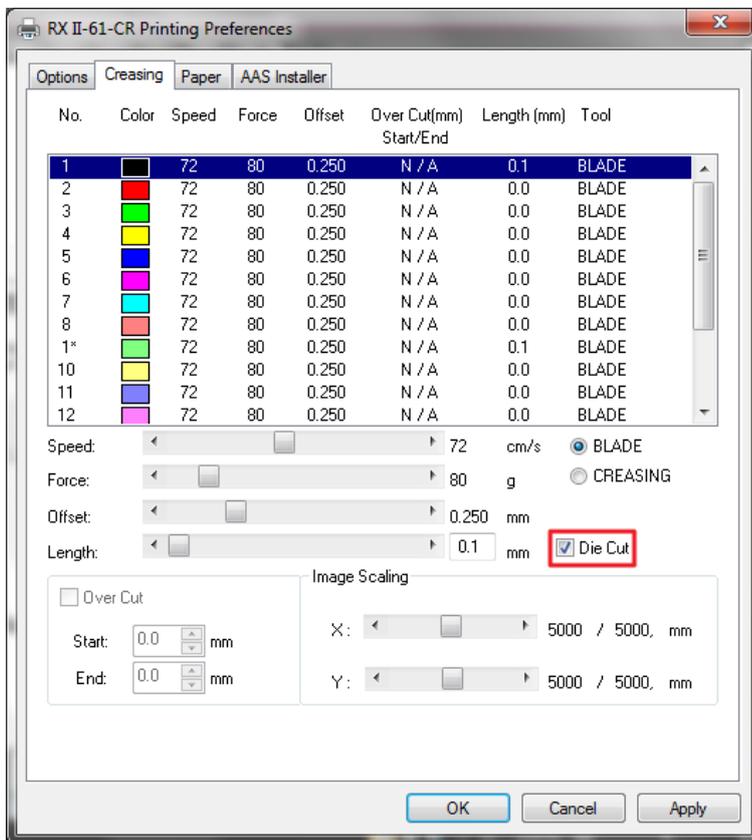


Figure 4-23

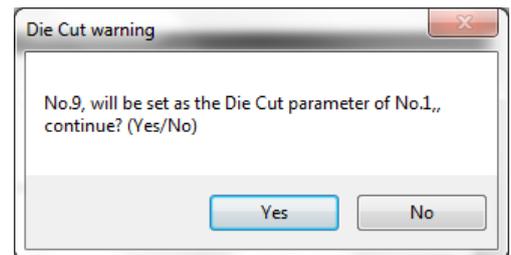


Figure 4-24

You can adjust the parameter such as force and length in both Color No.1 and Color No. 1\* as you need.

For example:

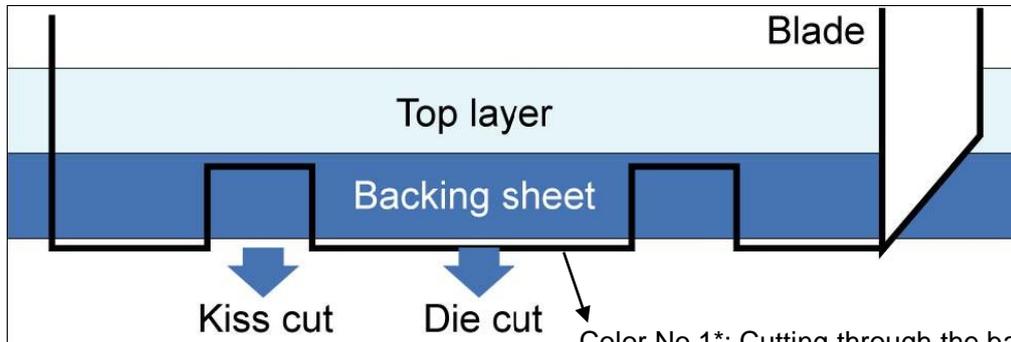


Figure 4-25

Color No.1\*: Cutting through the backing of the material

Color No.1: Cutting through the vinyl only

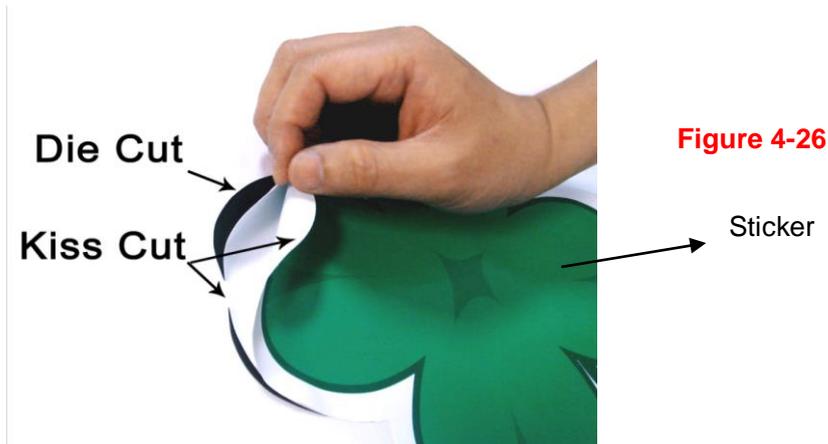
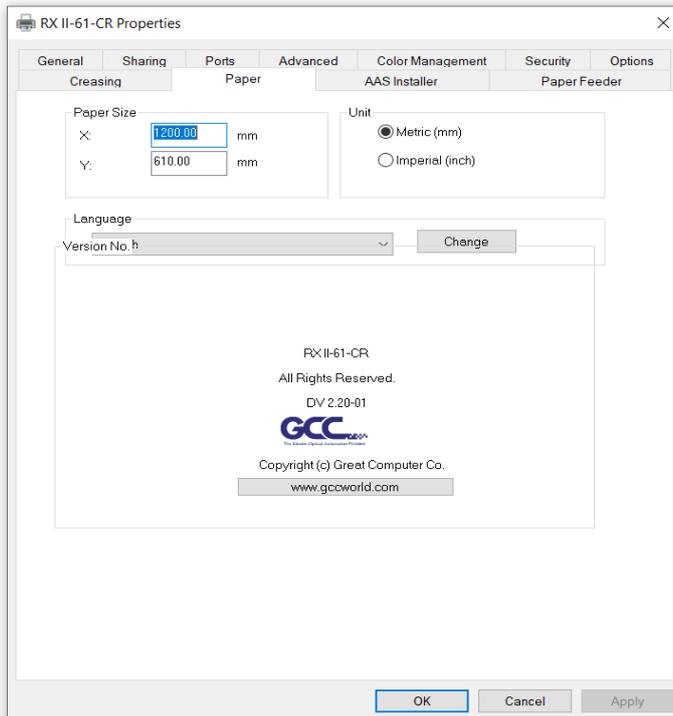


Figure 4-26

**Image Scaling (Creasing Page)**

The Image Scaling function can allow you to set the image scale of media length and width to decrease the difference between the actual length and the ideal length caused by various media used while processing cutting job.

### 4.6.3 RX II-Creasing Print Driver setting > Paper Page



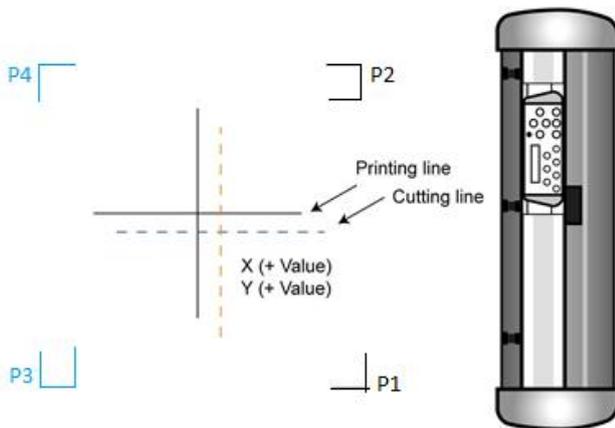
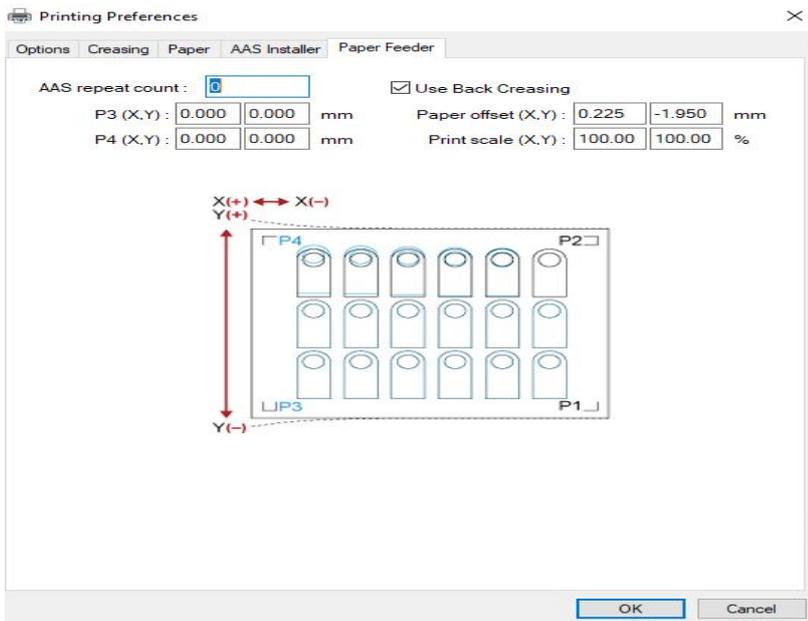
**Paper Size (Paper Page) [DEFAULT SETTING: Y = the width of machine; X will be automatically set to be twice the length of Y]**

The paper size represents your total work area. The X value represents the length and the Y value represents the width. The paper size should be set as the same as your image so you can get a better cutting quality.

**Unit (Paper Page) [DEFAULT SETTING: Metric (mm)]**

Here you can set your preferred measurement standard in which you would like use with the RX II series print driver. You can choose between metric or imperial standards.

#### 4.6.4 RX II-Creasing Print Driver setting > Paper Feeder Page



The setting in Paper Feeder Page works when 2-point positioning registration mark setting is applied in a cutting file. Please refer to A-4 Add Two Point Registration Marks section or A-5 Add Two Point Registration Marks section.

- **Repeat count:** to define the number of copies desired in one cutting job
- **P3 (X,Y) / P4 (X,Y):** to set offset X and Y value (Horizontal line is defined as Y and vertical is defined as X when facing the cutting plotter).

When the actual cutting line and the printed line need to be changed towards the direction of P1 mark, then simply add the negative value of the offset. If the direction is from the opposite of the P1 mark, then enter positive values for the offset. This method applies to both X and Y axes

## 4.7 Reference Parameter setting for different materials

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

| Material              | Personalized/ Wall stickers | Vehicle stickers         | Window decoration        | Window tint              |
|-----------------------|-----------------------------|--------------------------|--------------------------|--------------------------|
| Blade                 | red                         | red                      | red                      | red / yellow             |
| Blade tip length (mm) | 0.28                        | 0.27                     | 0.25                     | 0.09                     |
| Force (g)             | 105                         | 85                       | 95                       | 70                       |
| Speed (cm/sec)        | 72                          | 60                       | 65                       | 72                       |
| Offset (mm)           | 0.25                        | 0.25                     | 0.25                     | 0.25                     |
| Recommend model       | RX, Jaguar, Puma, EX, AR    | RX, Jaguar, Puma, EX, AR | RX, Jaguar, Puma, EX, AR | RX, Jaguar, Puma, EX, AR |
| Material              | Stencil                     | Reflective film          | Flock                    | Cardboard                |
| Blade                 | red / green                 | green                    | green                    | green                    |
| Blade tip length (mm) | 0.3                         | 0.5                      | 0.3                      | 0.3                      |
| Force (g)             | 180                         | 380                      | 135                      | 165                      |
| Speed (cm/sec)        | 15                          | 3                        | 30                       | 30                       |
| Offset (mm)           | 0.25 / 0.5                  | 0.5                      | 0.5                      | 0.5                      |
| Recommend model       | RX, Jaguar, Puma, EX, AR    | RX, Jaguar, Puma, EX     | RX, Jaguar, Puma, EX, AR | RX, Jaguar, Puma, EX, AR |
| Material              | Magnets                     | Protective tint          | Rhinestone               | Sandblast mask           |
| Blade                 | green                       | green                    | green                    | blue                     |
| Blade tip length (mm) | 0.8                         | 0.3                      | 0.8                      | 0.27                     |
| Force (g)             | 580                         | 320                      | 190                      | 85                       |
| Speed (cm/sec)        | 3                           | 3                        | 15                       | 60                       |
| Offset (mm)           | 0.5                         | 0.5                      | 0.5                      | 0.25                     |
| Recommend model       | RX, Jaguar                  | RX, Jaguar, Puma, EX     | RX, Jaguar, Puma         | RX, Jaguar, Puma, EX, AR |
| Material              | Small text (vinyl)          |                          |                          |                          |
| Blade                 | black                       |                          |                          |                          |
| Blade tip length (mm) | 0.27                        |                          |                          |                          |
| Force (g)             | thick: 150<br>thin: 90      |                          |                          |                          |
| Speed (cm/sec)        | 9                           |                          |                          |                          |
| Offset (mm)           | 0.175                       |                          |                          |                          |
| Recommend model       | RX, Jaguar, Puma            |                          |                          |                          |

## Chapter 5 Automatic-Aligning System

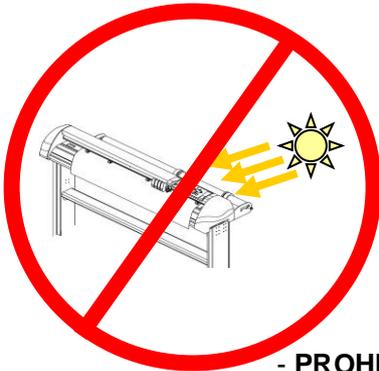
Please note that this chapter is only an instruction to AASII; for step-by-step instructions, please refer to the following chapters: A-4 CorelDRAW Plug-in , A-5 Illustrator Plug-In, A-6 GreatCut Plug-In.

### 5.1 Introduction

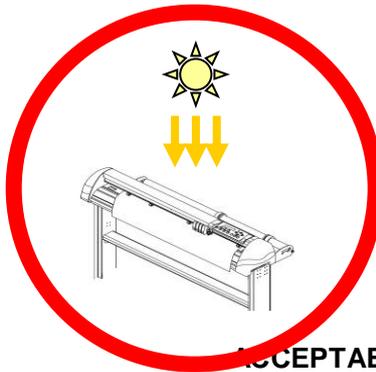
The RX II series cutting plotters feature a standard Automatic-Aligning System (AAS II) to guarantee precise contour cutting quality by detecting the registration marks printed around the graphic.

#### Notice

- Avoid any kind of light source horizontally illuminating the AAS module.



- PROHIBITED



ACCEPTABLE

- DO NOT take off the cover of AAS module while in operation.



- PROHIBITED

## 5.2 AAS Contour Cutting System

The AAS system has one calibration procedures to ensure maximum accuracy of AAS operation. To operate the AAS you need to learn about the method of media feeding firstly. (Refer to [4.2 How to load the sheet media into machine in P. 77](#))

### 5.2.1 Notice for Registration Marks

The first registration mark is designed to be different in order to identify the origin for AAS auto-detection. The following precaution must be aware for registration marks to be read automatically.

- ▶ Type of media
- ▶ Registration mark pattern
- ▶ Reading range required for detection the registration marks
- ▶ Position for registration marks and medium

#### The registration marks have to be:

- ▶ Created by cutting software like GreatCut, SCAL, Illustrator Plug-In or CoreIDRAW plug-in, SignPal.
- ▶ Color: black color (printing quality of registration marks is essential; incorrect, misaligned colors, blurry or smeared printout might leading to inaccurate cutting result)

|                   | Length    | Thickness | Margin    |
|-------------------|-----------|-----------|-----------|
| Range             | 5 ~ 50 mm | 1 ~ 2 mm  | 0 ~ 50 mm |
| Optimized Setting | 25 mm     | 1 mm      | 5 mm      |

#### The cutter cannot detect the marks while:

- ▶ Cutter carriage is not located near the outside area of first mark before detecting  
(See the picture in page103 for auto-detecting area of first mark.)

- ▶ Medium thickness is more than 0.8mm
- ▶ Transparent medium is used
- ▶ Non-monochrome drawing. The marks can't be read if it is printed on colored medium
- ▶ Dirty or creased medium surface

## 5.2.2 AAS II on RX II series

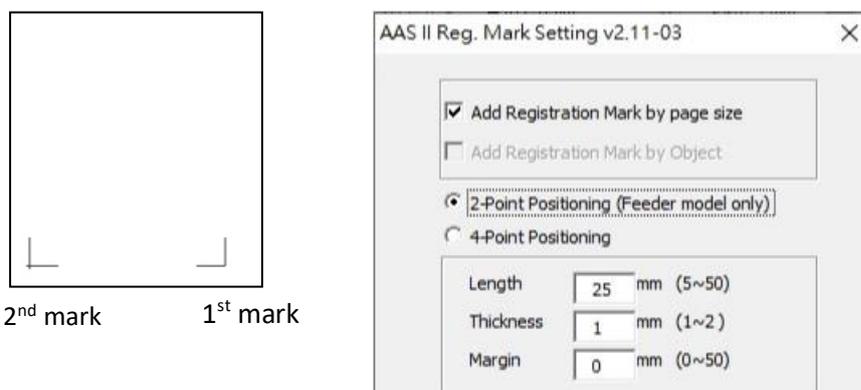
There are four types of AAS II mark patterns: [2-Point Positioning](#) (Feeder Mode only), [4-Point Positioning](#), [Segmental Positioning](#), and [Multiple Copies](#).

Note that before print out your designs by inkjet printers, the registration marks have to be created on your graphic designs by cutting software like GreatCut, SCAL, SignPal or GCC CorelDraw plug-in. Hand-made marks or drawings won't be reorganized by GCC cutting plotters.

For more details about registration mark setting in cutting software, please refer to the software setting in Appendix"

### 1. 2-Point Positioning (Feeder mode only)

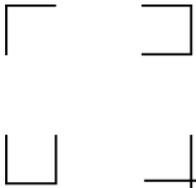
This provides simply mode that enable to shorten the time of detecting the registration mark.



## 2. 4-Point Positioning

This is the basic mark pattern that AAS II will auto detect four registration marks and contour cut images inside those marks.

- Command: Esc.D1;(XDist);(YDist):
- Layout: 4 registration marks at the 4 corners around the design



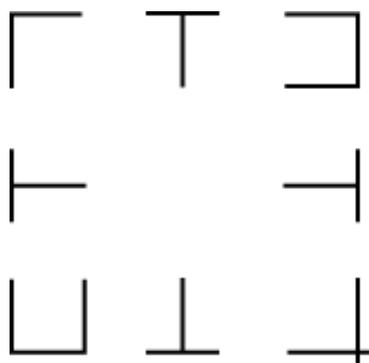
## 3. Segmental Positioning

In addition to 4 original points, the intermediate registration marks are added on both X axis and Y axis to help contour cut accurately, especially for cutting large images.

- **Command:** Esc.D2;(XDist);(YDist);(XStep);(YStep):
- **Layout:**

In-between distance on X: 200~600mm, default 300mm

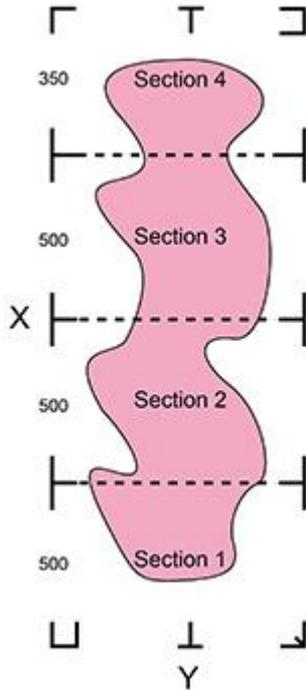
In-between distance on Y: 200-600mm, default 300mm



- **High Precision Long Picture Cutting**

RX II series performs section cutting to enhance output qualities.

- The object will be output following the section pattern based on the Segmental Positioning parameters.
- Cutting sequence: Section1-> Section 2-> Section 3- > Section 4

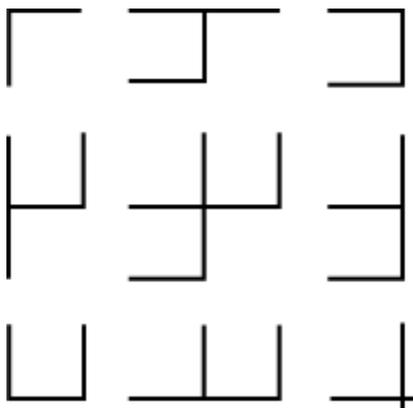


### 3. Multiple Copies

The function is used to duplicate images to let you cut quantities of images at a time. The AAS II sensor will automatically scan registration marks for each individual image to ensure the contour cutting precision.

■ **Command:** Esc.D3;(XCopies);(YCopies);(Space):

■ **Layout:**



### 5.2.3 Automatic Distinction of the Plot Direction

For the convenience of users, RX II series automatically detects the feeding direction of the material when performing contour cutting. Figure 5-1 shows the Registration Mark detection sequence when the material is fed in the standard way (1->2->3->4) while Figure 5-2 is how RX II series detects registration marks (3->4->1->2) when the material is reversely fed. RX II series is able to detect registration marks and performs contour cutting however users feed the media.

#### Direction detection steps:

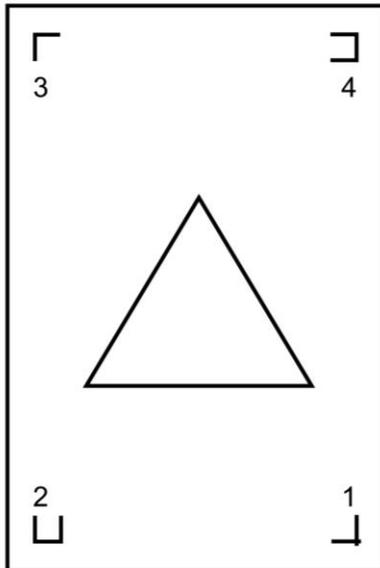
(Please see Figure 5-2)

- a. Detects the position of the 3rd Registration Mark
- b. Proceeds to the 4th Registration Mark to detect the direction

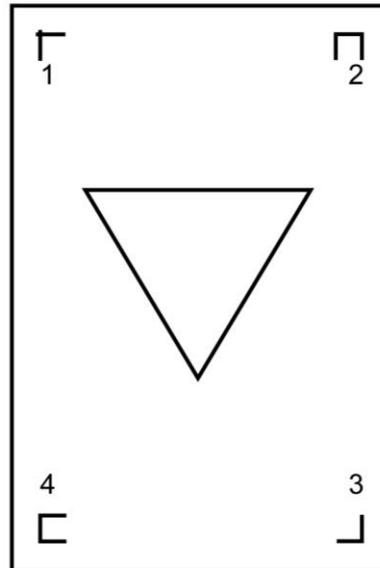
(The direction detection procedure will be performed by the detection of 4th Registration Mark)

- c. The information is reflected in the driver and recalculated before output
- d. The registration mark detection and object output process is implemented

(Registration Mark detection sequence: 3->4->1->2)



Standard Media Feeding Direction 1->2->3->4



Reversed Media Feeding Direction 3->4->1->2

Figure 5-1

Figure 5-2

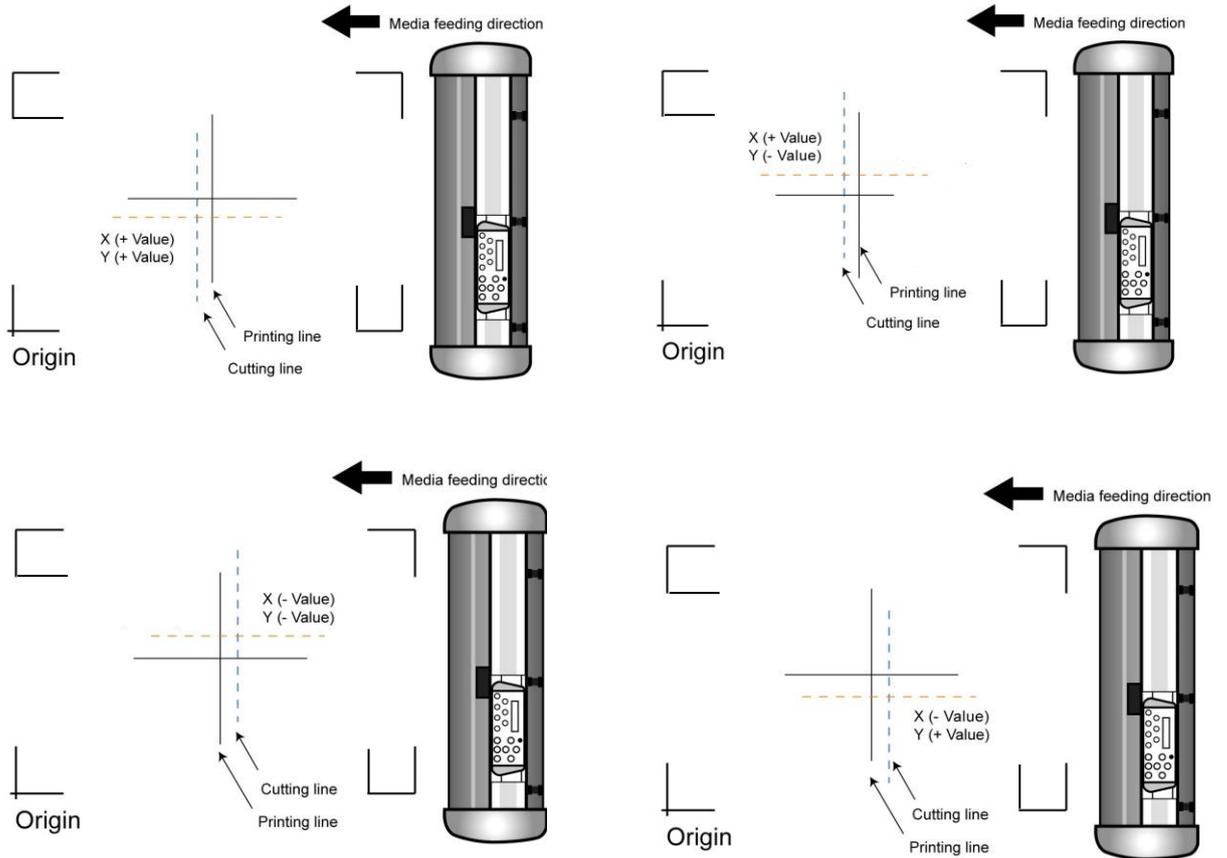
## 5.3 Printer Test

Before performing AAS contour cutting, it's recommended to print out a test file that you can find in the enclosed Installation CD to make sure the AAS II cutting accuracy of RX II series.

There are two testing files for AASII:

1. AAS II\_X\_Y\_Offset\_Caberation\_A4 .eps (A4 size)
2. AAS II\_X\_Y\_Offset\_Caberation\_600\_600 .eps (Default setting, it is recommended for testing)

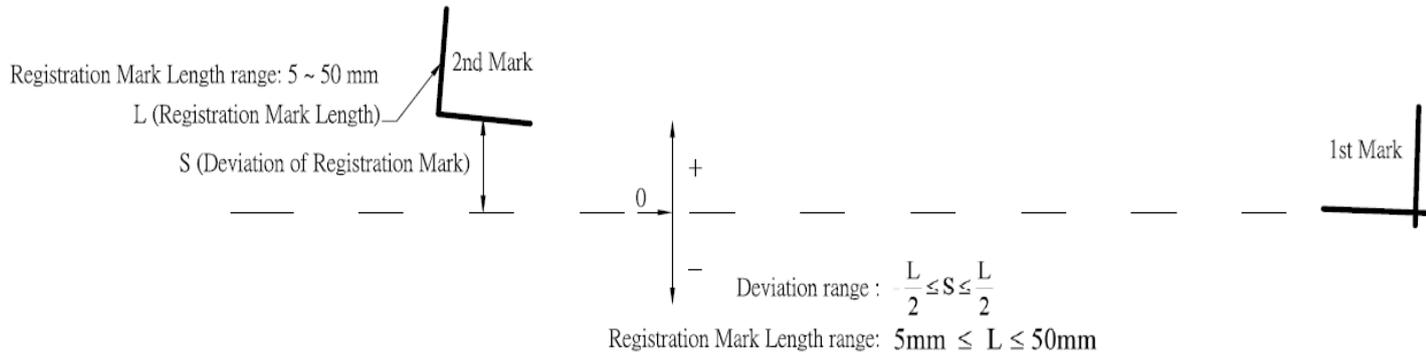
- Print out the testing graphic. ( Please use high precision printer)
- Load the graphic to RX II series and sent the file to test the cutting job
- If there are any adjustments to be made, you can change the offset value by following the steps:
  - ▶ Measure the offset values from the printed line and the actual cutting line.
  - ▶ Enter the AAS Offset under MISC function for the values you just measured, then press Enter
  - ▶ Test the cutting again
- AAS II offset X and Y value is defined as following:
  - ▶ Horizontal line is defined as X and vertical is defined as Y (when facing the cutting plotter)
  - ▶ When the actual cutting line and the printed line need to be changed towards the direction of origin mark, then simply add the negative value of the offset. If the direction is from the opposite of the origin mark, then enter positive values for the offset (see the following figures). This method applies to both X and Y axes.

**Note:**

- Before adjusting the AAS II settings, please proceed scaling for width and length.
- The blade offset value isn't set for this test graphic, please set it according to the blade you use.
- If you have any question, please contact us or your local distributor for assistance.

### 5.4 Registration Mark Offset Range

Please correctly load your media (refer to the alignment ruler on the platen) to make sure the registration marks are successfully detected. Deviation exceeds the range below will lead to detection failure.



### 5.5 Contour Cutting

For accurate contour cutting with AAS function, please proceed the following steps:

#### Step 1 Creating Graphics

- Create the graphic that you want to print and cut in your software.



- Create a contour for cutting around the graphic.



TIPS1: Leave some space between the graphic and contour line.

TIPS2: Create the contour in a separate layer and assign a different color for it.

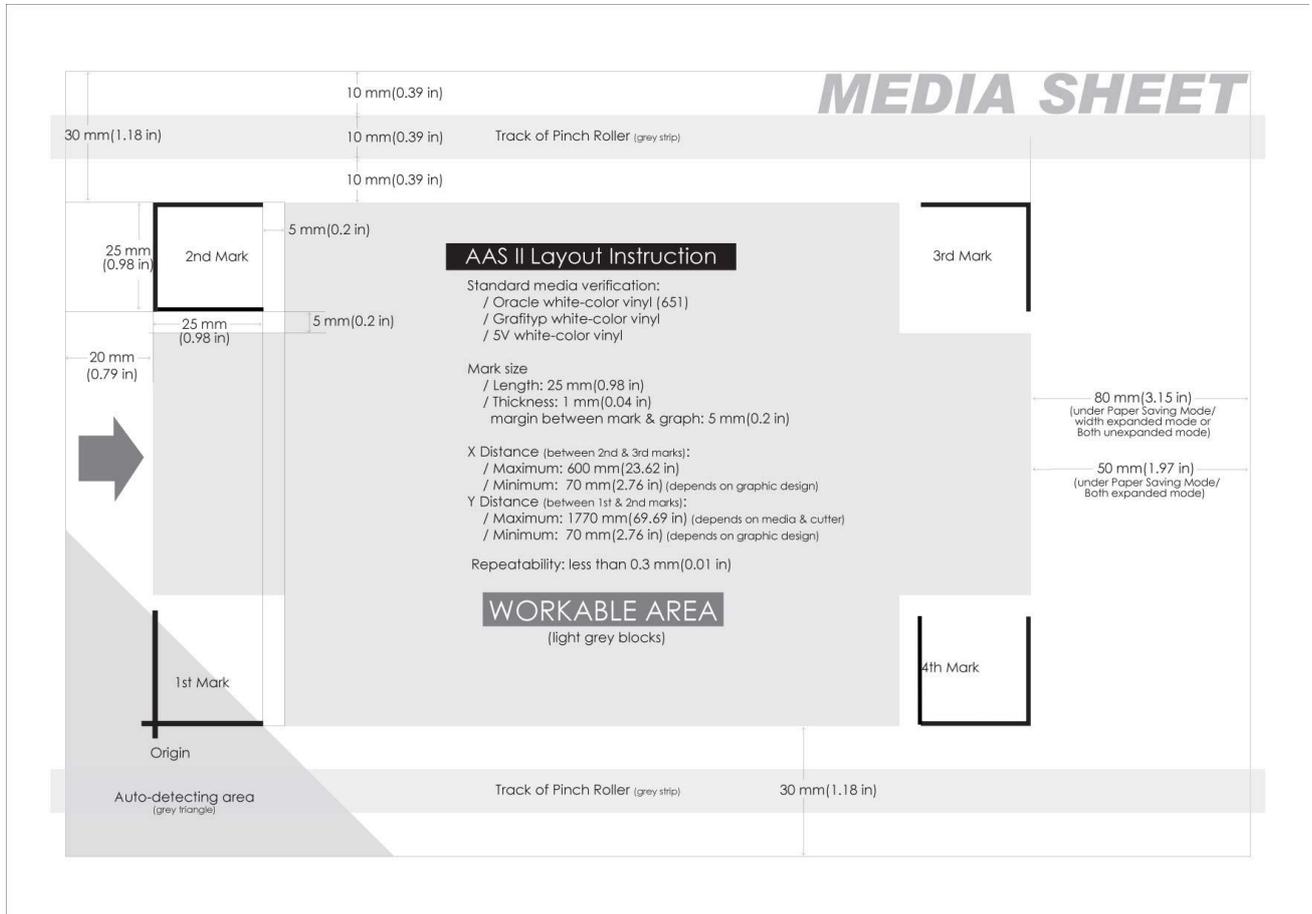
- Add registration marks around the graphic.

**Note:**

The Multiple Copies function is also available. It automatically copy the graphic and registration marks.

## Step 2 Placing the Registration Marks

- The AAS Layout Instruction:



\* Auto-detection function on the 1<sup>st</sup> mark covers the grey area

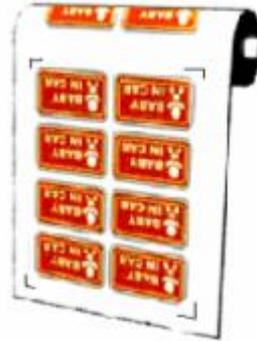
- Suggested 30mm margin on both left and right sides of media sheet.
- Suggested 20~30mm margin on top of media sheet, and at least 50mm margin on the bottom edge to prevent sheets dropping or any error occurred while media sizing.

\* Auto-detection function on the 1<sup>st</sup> mark covers the grey area

- Suggested 30mm margin on both left and right sides of media sheet.
- Suggested 20~30mm margin on top of media sheet, and at least 50mm margin on the bottom edge to prevent sheets dropping or any error occurred while media sizing.

**Step 3** Print the Graphics

- Print the graphic and the marks with your printer



(Scaling = 100%).

- When printing on a roll media, make sure the orientation as following:

**Step 4** Load the printout onto cutter

- The Origin Mark is different from the rest registration marks. Please make sure the media is fed with correct direction.

**Step 5** Cut the Contour

- Send out the command from software to perform the contour cutting job.

## 5.6 Tips for AAS

For getting better results of contour cutting, there are some tips below for your reference.

- Keep light sources simple and avoid illuminating from the sides of cutter.
- Before operating AAS, change the maximum paper size in RX II series driver property.

**Step 1** Find the **RX II model** in the "Printer & Fax" folder of your PC.

**Step 2** Open the Properties window and select the "Paper" tab.

**Step 3** Change the maximum Paper Size of X to **1200mm**.

- Adjust the cutting speed to between 300~600mm/sec.
- Avoid the registration marks locating on the tracks of pinch rollers.
- Make sure the edge of the media is not bent up when detecting 5.7 registration marks.

## Chapter 6 Maintenance

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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.

### 6.1 Cleaning the Cutting Plotter

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

#### Cleaning Precaution !



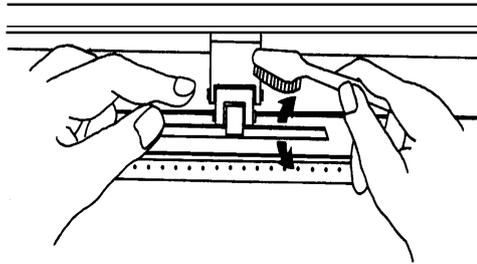
- Unplug the cutting plotter before cleaning it in order to prevent electrical shock.
- Never use solvents, abrasive cleaners or strong detergents for cleaning. They may damage the surface of the cutting plotter and the moving parts.

#### Recommended Method

- Gently wipe the cutting plotter 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.

## 6.2 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 6-1.



**Figure 6-1**

## 6.3 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.

## Chapter 7 Trouble Shooting

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### 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:**

#### 7.1 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.

## 7.2 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**

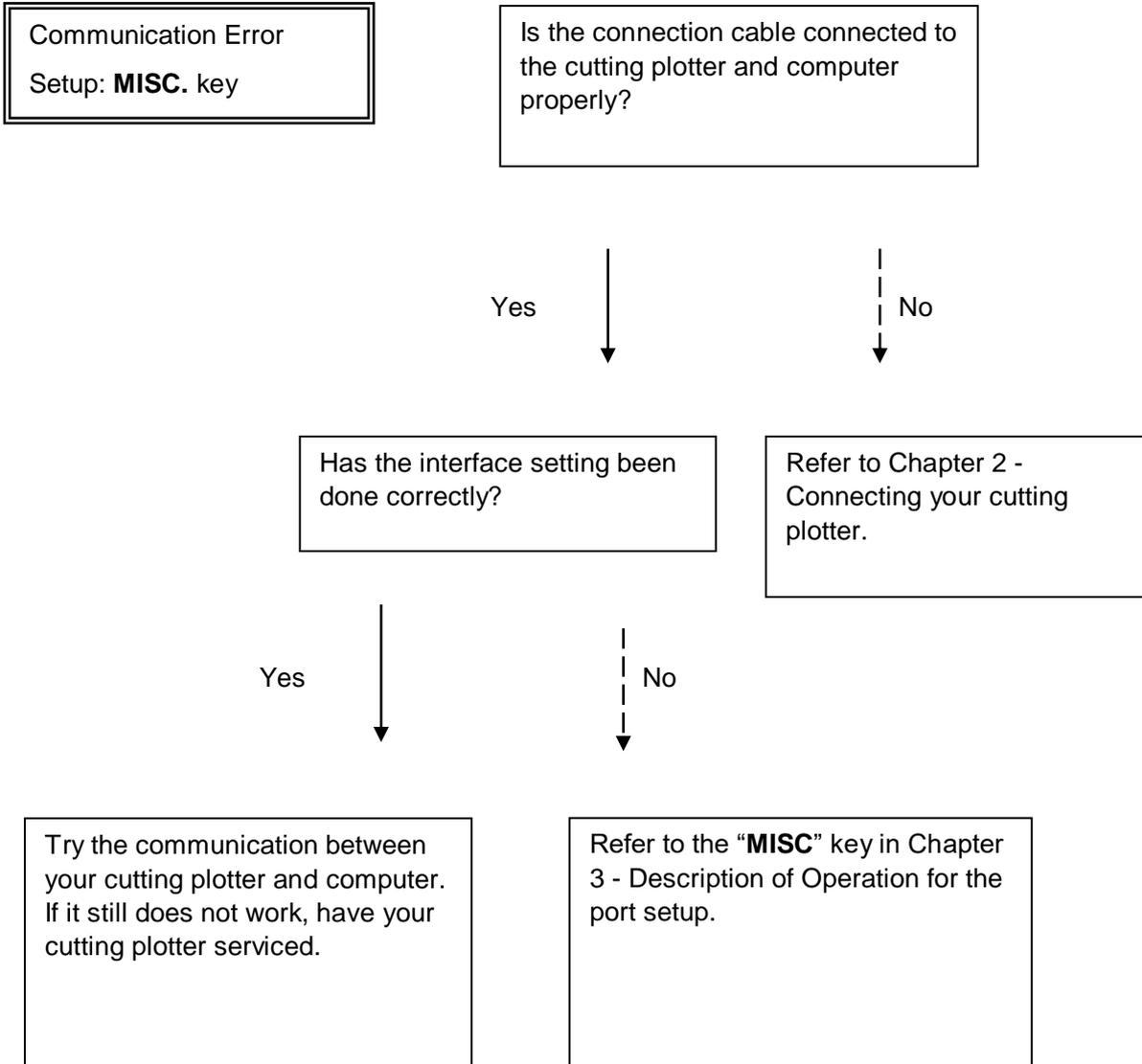
This message indicates that the blade up/down sensor malfunction. Re-power on to re-boot system. If the problem still exists, find a serviceman.

**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.

### 7.3 Cutting Plotter/Computer Communication Problems

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



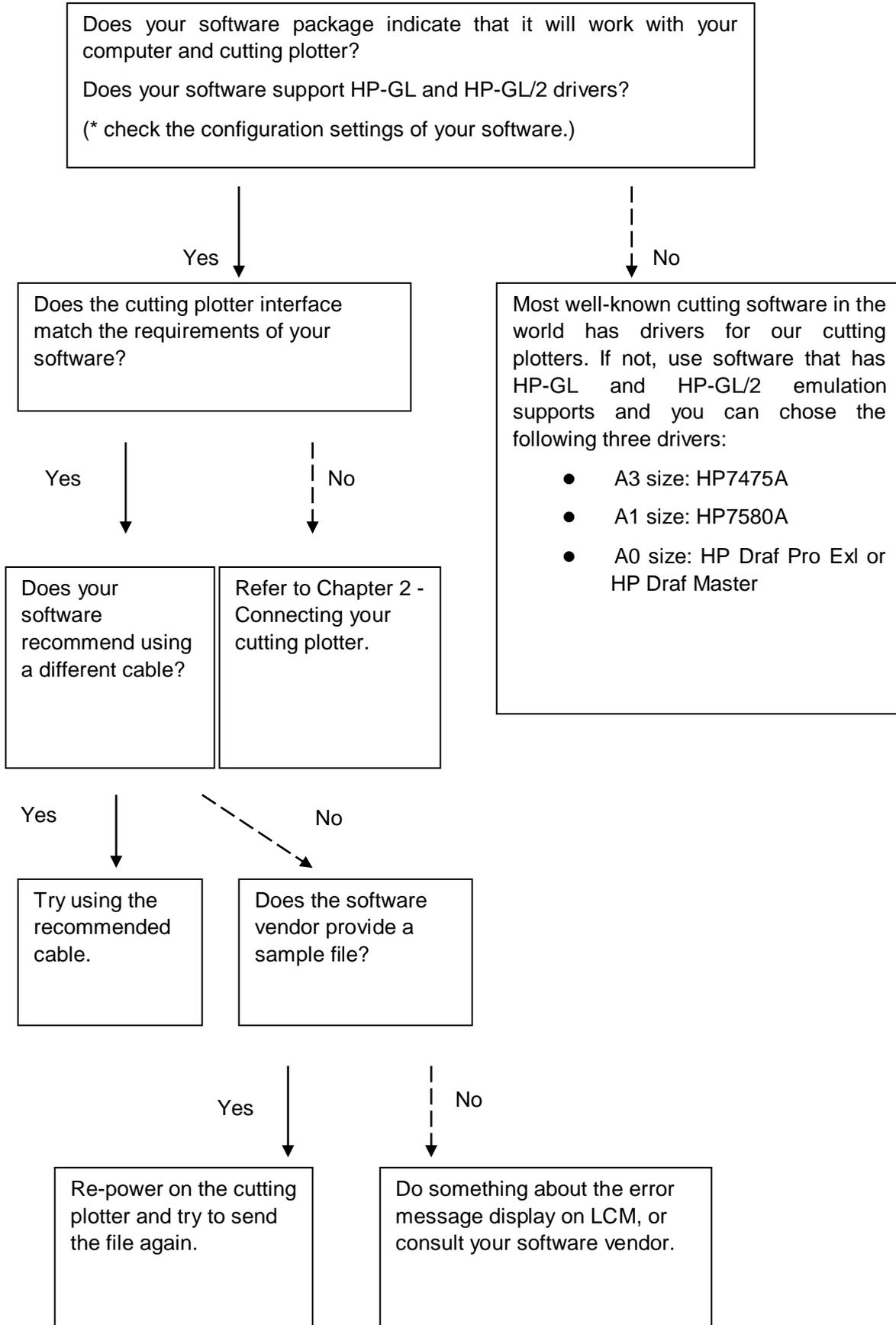
**Note:**  
The computer also needs to set up compatible communication parameters to the cutting plotter set up.

HP-GL/2 Cmd. Error

If your cutting plotter cannot 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.

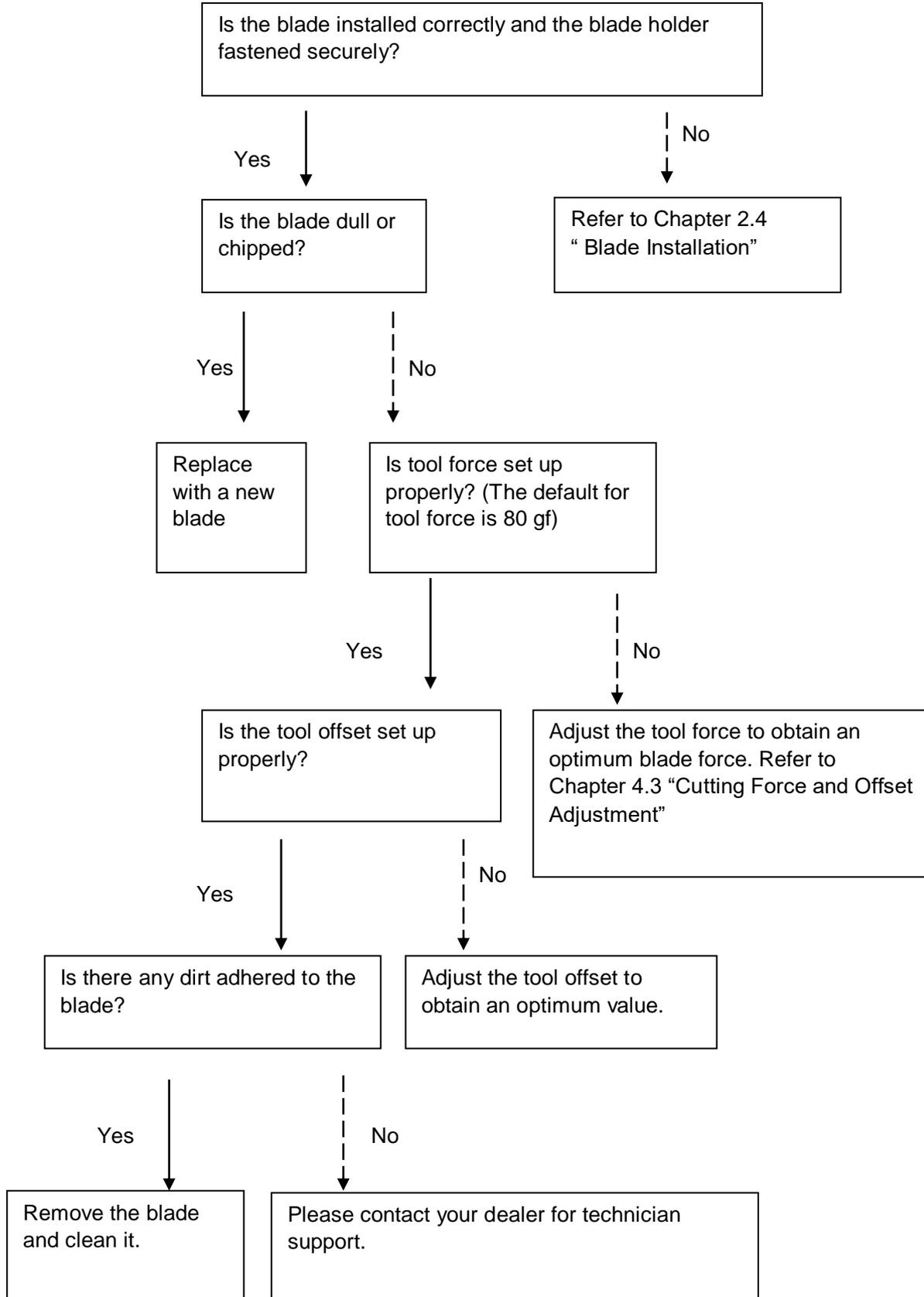
## 7.4 Software Problems

Check the following first:



## 7.5 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.



## A-1 Specification

| Item   | Description  |
|--|--|
| <b>Automatic Finishing system (Cutter with auto feeder unit)</b> |  |
| Supported media size   | A4 (297 x 210 mm), SRA4 (320 x 235 mm), A3 (297 x 420 mm), A3+ (329 x 483 mm), SRA3 (320 x 450 mm), A3+ (329 x 483 mm), B3 (500 x 353 mm), B2 (500 x 707 mm)<br>8.5 x 11 in. (215.9 x 279.4 mm), 8.5 x 14 in. (215.9 x 355.6 mm), 11 x 17 in. (279.4 x 431.8 mm), 12 x 18 in. (304.8 x 457.2 mm), 13 x 19 in. (330.2 x 482.6 mm), 14 x 20 in. (355.6 x 508 mm) |
| Interface  | USB 2.0 (Full Speed), Serial (RS-232C) and Ethernet  |
| Power source   | 100 to 240 V AC (It is required three power outlet.)   |
| Operating environment  | Temperature: 15 to 30°C/60°F-86°F<br>Humidity: 25 to 75 % RH (non-condensing)  |
| Dimensions (cutter with feeder)                                  | Approx. 1098 (W) x 1140 (D) x 782 (H) mm   |
| Weight   | Approx. 47.5 kg (Cutter unit: 25.5 kg, Auto feeder unit: 22 kg)  |
| <b>Cutter unit (RXII-61 Creasing)</b>                            |  |
| Cutting speed  | Max. 1,530 mm/s (at 45° direction)   |
| Acceleration   | Max. 4.2 G   |
| Cutting force  | Max. 600 g   |
| Interface  | USB 2.0 (Full Speed), Serial (RS-232C) and Ethernet  |
| Power source   | 100 to 240 V AC  |
| Power consumption  | Max. 251.8 watts   |
| <b>Auto feeder unit</b>  |  |
| Supported media  | Width: 279 to 500 mm, Length: 210 to 700 mm<br>Up to 350 g/m <sup>2</sup>  |
| Capacity of supply tray  | 250 Sheets @150 g/m <sup>2</sup> or up to 50 mm height<br>(It varies by the material, thickness and condition of media.)   |
| Interface  | Serial (RS-232C)   |
| Power source   | AC adapter, 100 to 240 V AC, Approx. 60 VA at output power   |

- Compatible with Windows 7 and above & MAC OS X 10.6 and above.
- GCC reserves the right to change the specifications at any time without notice.

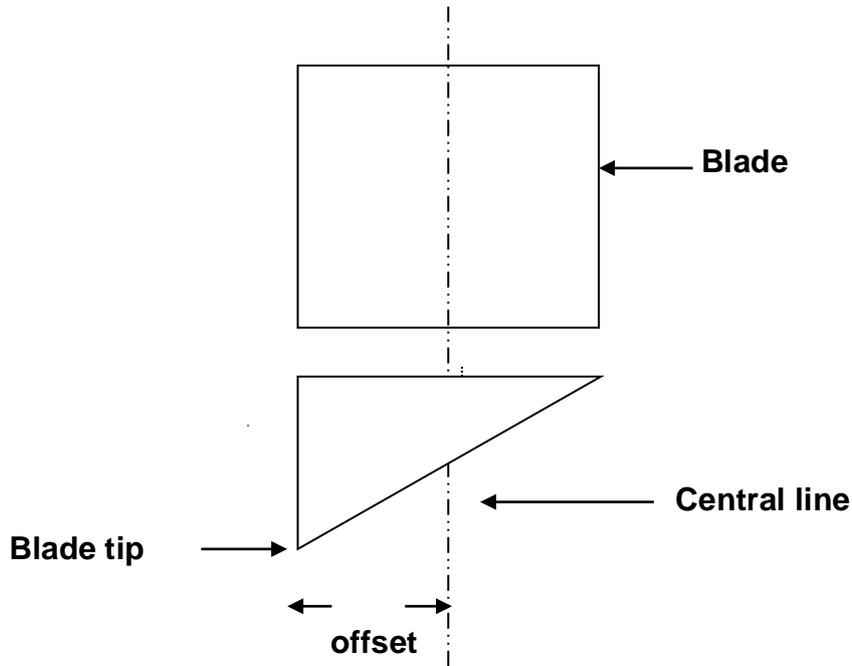
# Blade Specification

|  |   |
|--|---|
| 265019700G   | For cutting thick fluorescent and window tint film. Also for cutting detailed work in standard vinyl.                                     |
|  | The blade is 45° with <b>Red Cap</b> , 0.25 mm blade offset, and 2.5 mm blade diameter.   |
|    |   |
| 265017540G   | For cutting reflective vinyl, cardboard, sandblast, flock, and stencil sharp edge.  |
|  | The blade is 60° with <b>Green Cap</b> , 0.50 mm blade offset, and 2.5 mm blade diameter.   |
|   |   |
| 265017550G   | For cutting thin sandblast mask and stencil. The blade with sharp angle and special design, allowing it to maneuver around sharp corners. |
|  | The blade is 60° with <b>Blue Cap</b> , 0.25 mm blade offset, and 2.5 mm blade diameter.  |
|  |   |
| 265017560G   | For cutting small text and fine detail. Sharp blade with smallest offset.   |
|  | The blade is 50° with <b>Black Cap</b> , 0.175 mm blade offset, and 2.5 mm blade diameter.  |
|  |   |
| 265017530G   | For thin and delicate media such as window tint.  |
|  | The blade is 25° with <b>Yellow Cap</b> , 0.25 mm blade offset, and 2.5 mm blade diameter.  |
|  |   |

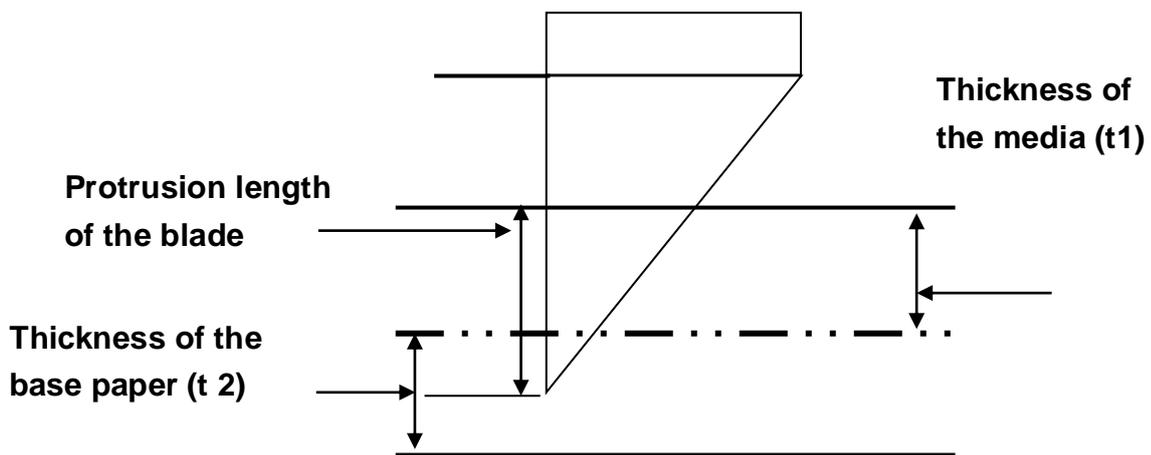
# About the Tool

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



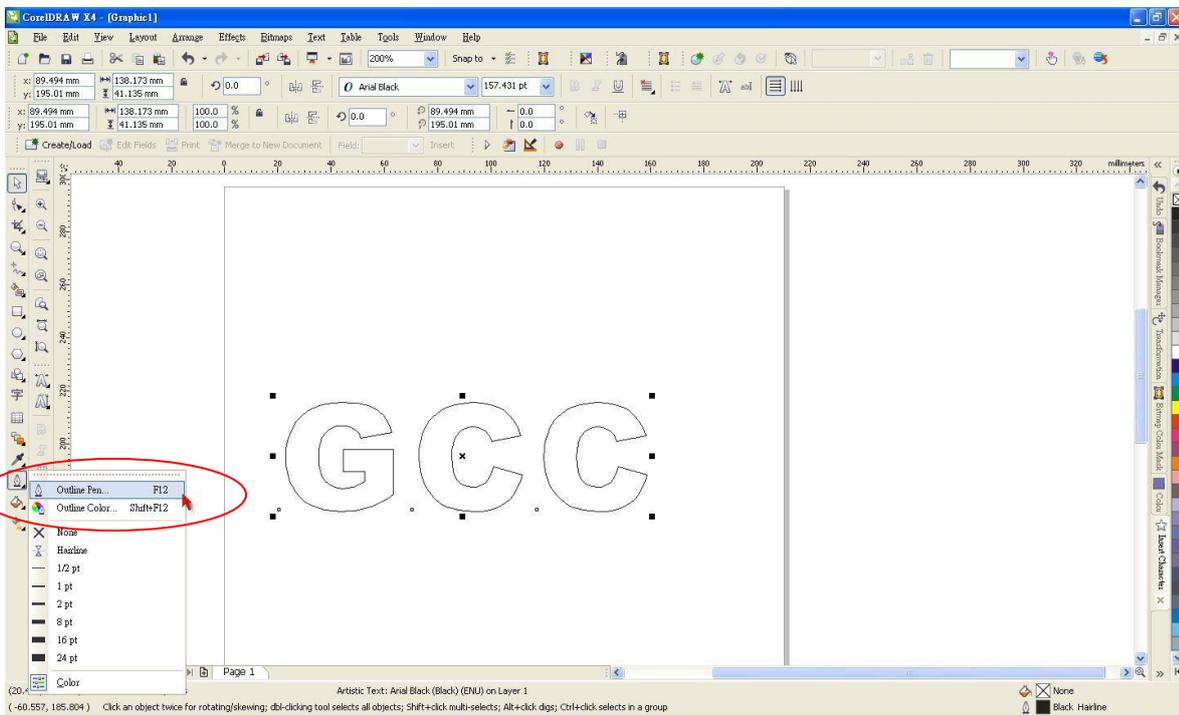
Length of protrusion =  $t_1 + t_2 / 2$ , but for your convenience you may just make it about 0.3mm ~ 0.5mm beyond the blade holder tip.

# CoreIDRAW Output Instruction

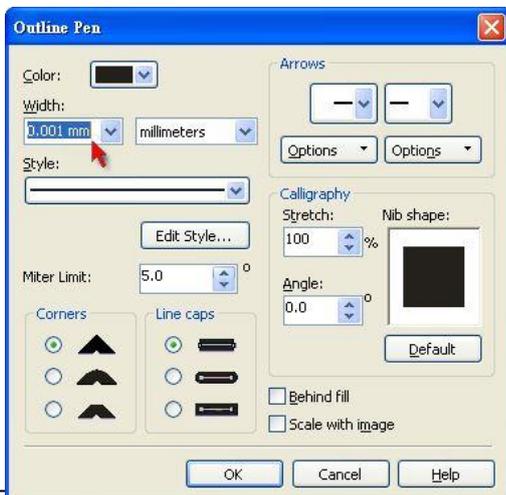
The following is an example of how to output the file with CoreIDRAW.

## User Instructions

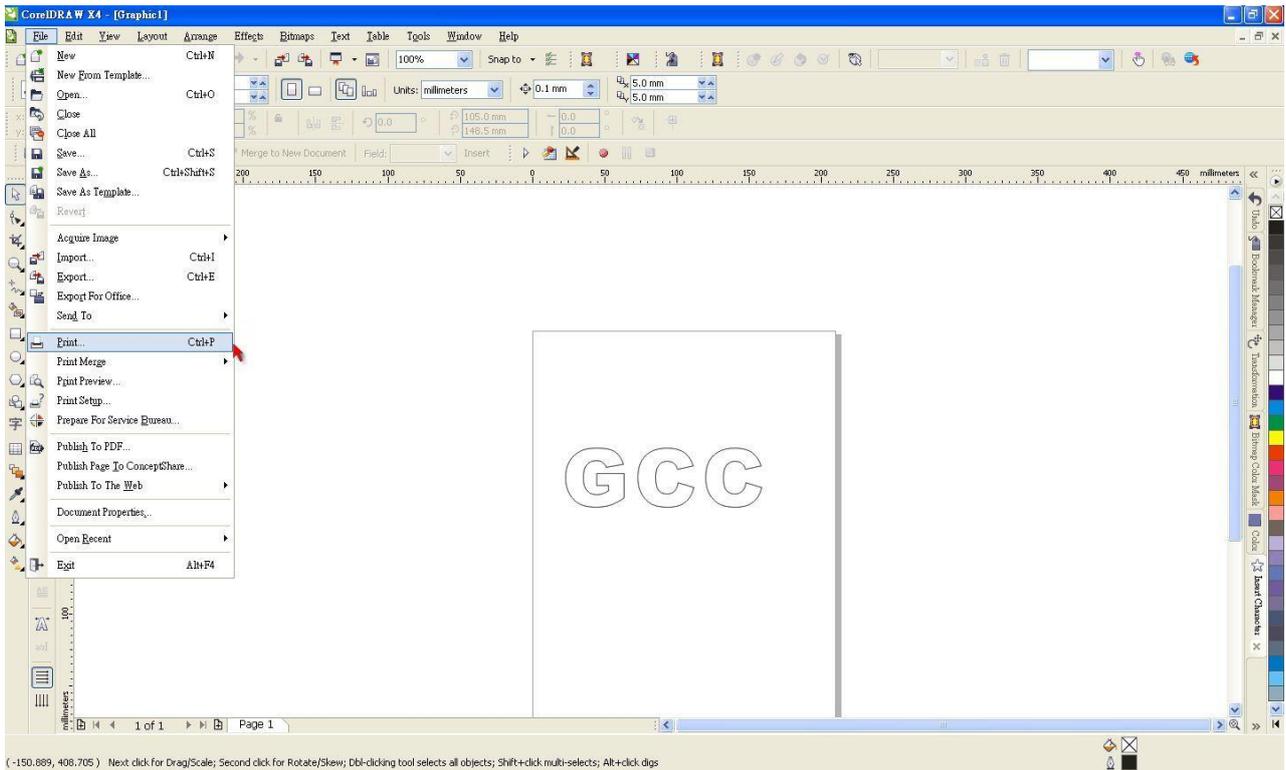
1. Open CoreIDRAW, finish editing all the files you wish to plot and select all the images at once.
2. Select “Outline Pen” to adjust the outline for cutting.



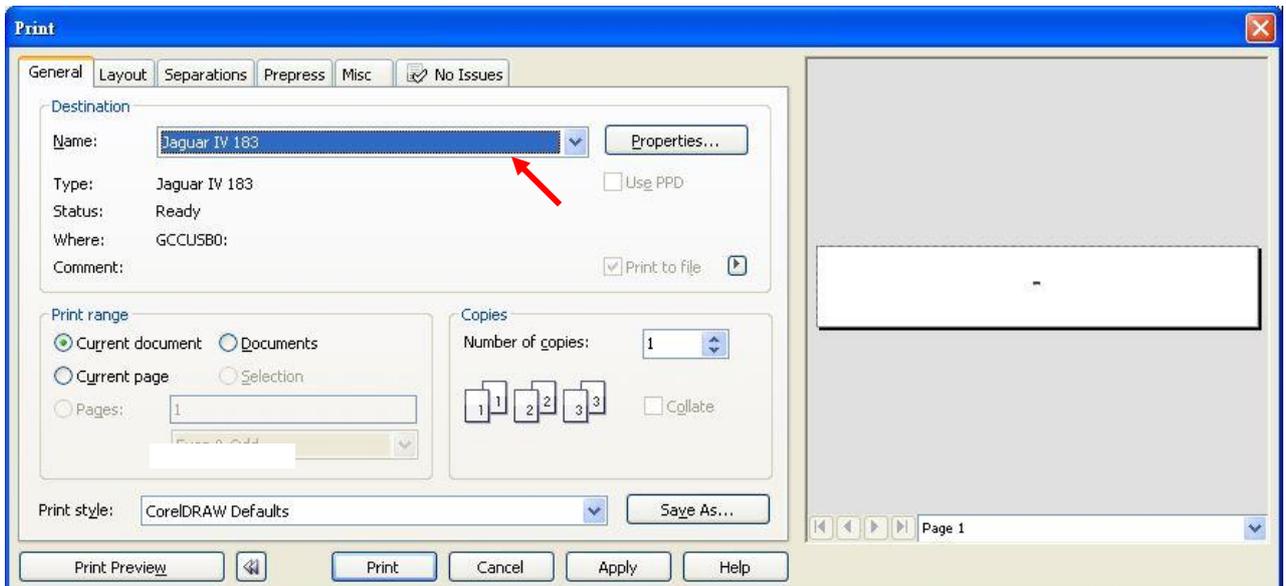
3. Adjust the value of pen width to 0.001 mm and click “OK” to save your input.



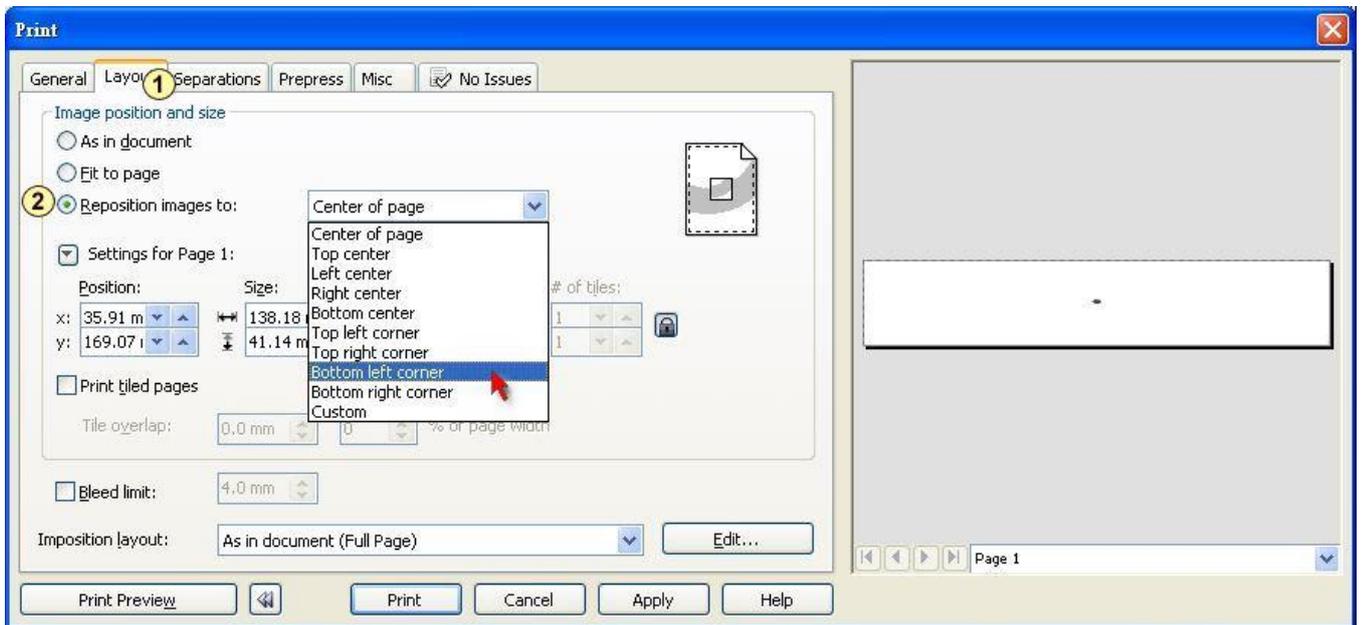
4. Select “File → Print” to output the file to your cutters.



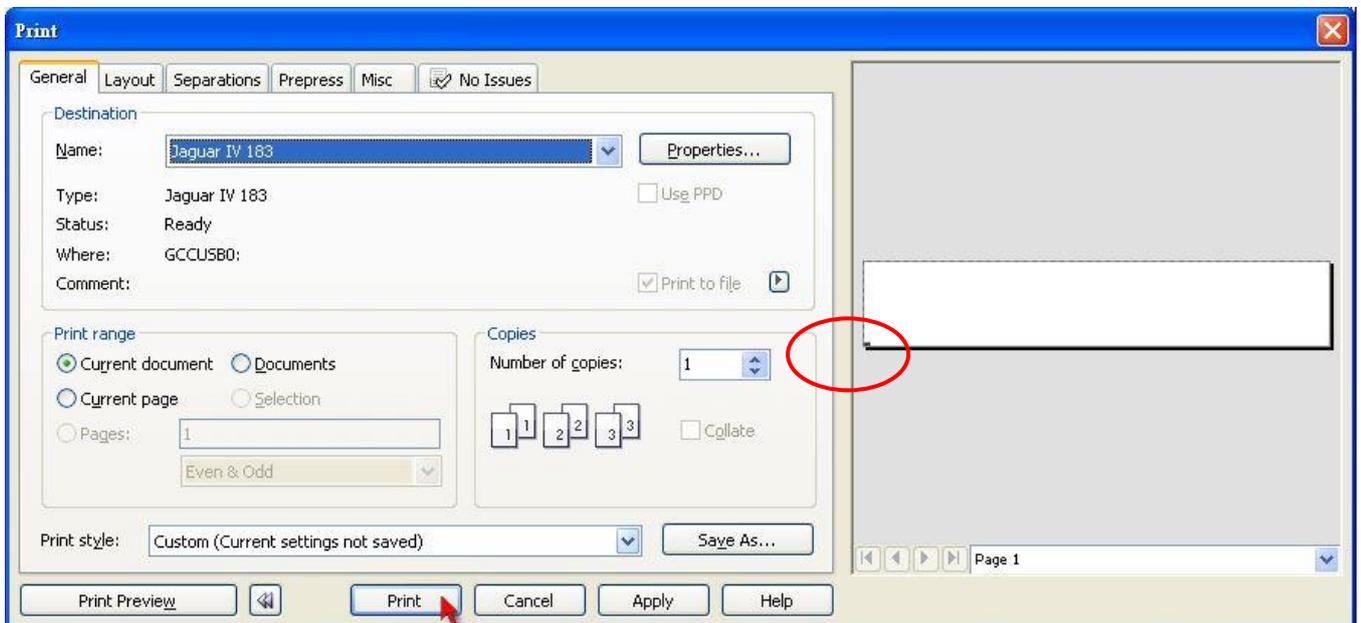
5. Choose the correct model you have installed.



6. Choose the “Layout page” and click the “Reposition images to: → Bottom left corner”.  
**Please note that you must put your image at the bottom left corner.**



7. Go back to the General page and check that your image is at the bottom left corner. Click “Print” and get a wonderful cutting image.



# CoreDRAW Plug-In Instruction

AASII VBA Installer is applicable for CoreDRAW Version 13, 14, 15, 16, 17, 18

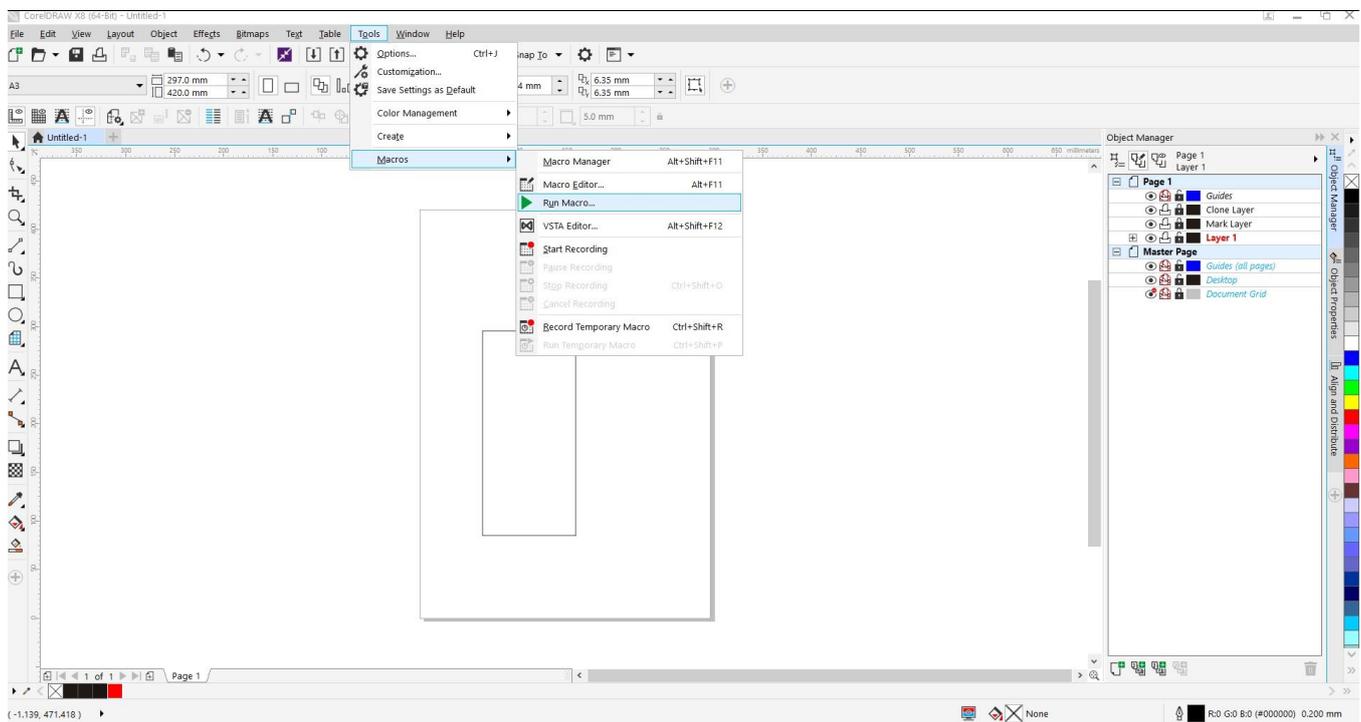
## Installation

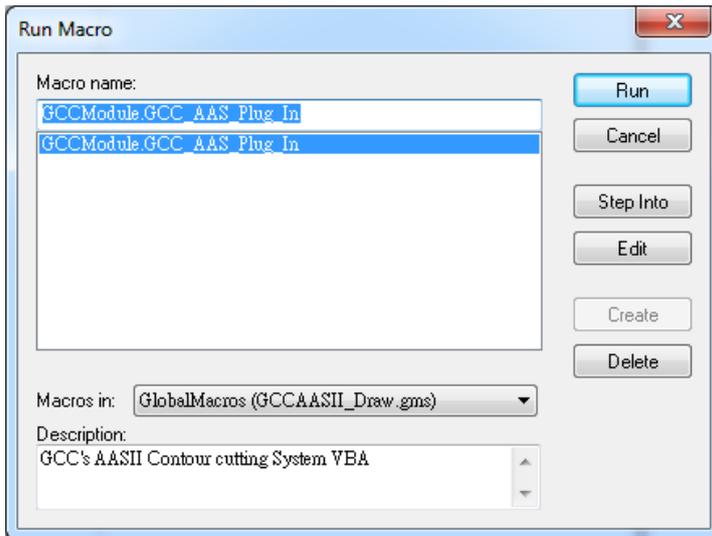
Please refer to Step 8 in Chapter 2.7.1.2 Driver Installation to install AAS plug-in for CoreDRAW.

## Run CoreDRAW AAS Plug-in

**Step 1** Run CoreDRAW to edit your graphics and select all images at once when you wish to plot.

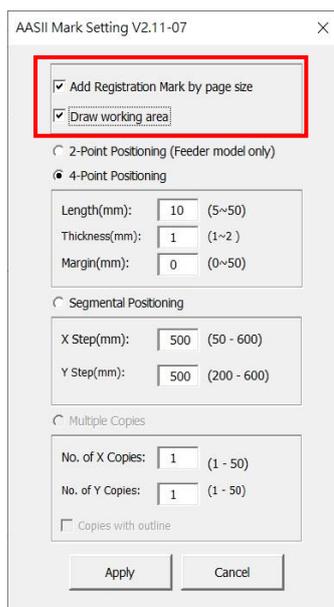
**Step 2** Select “Tools→Macros→Run Macro.” Then select **Global Macros** (**GCCAASII\_Draw13.gms**) under the “Macros in” manual, and press “Run”.

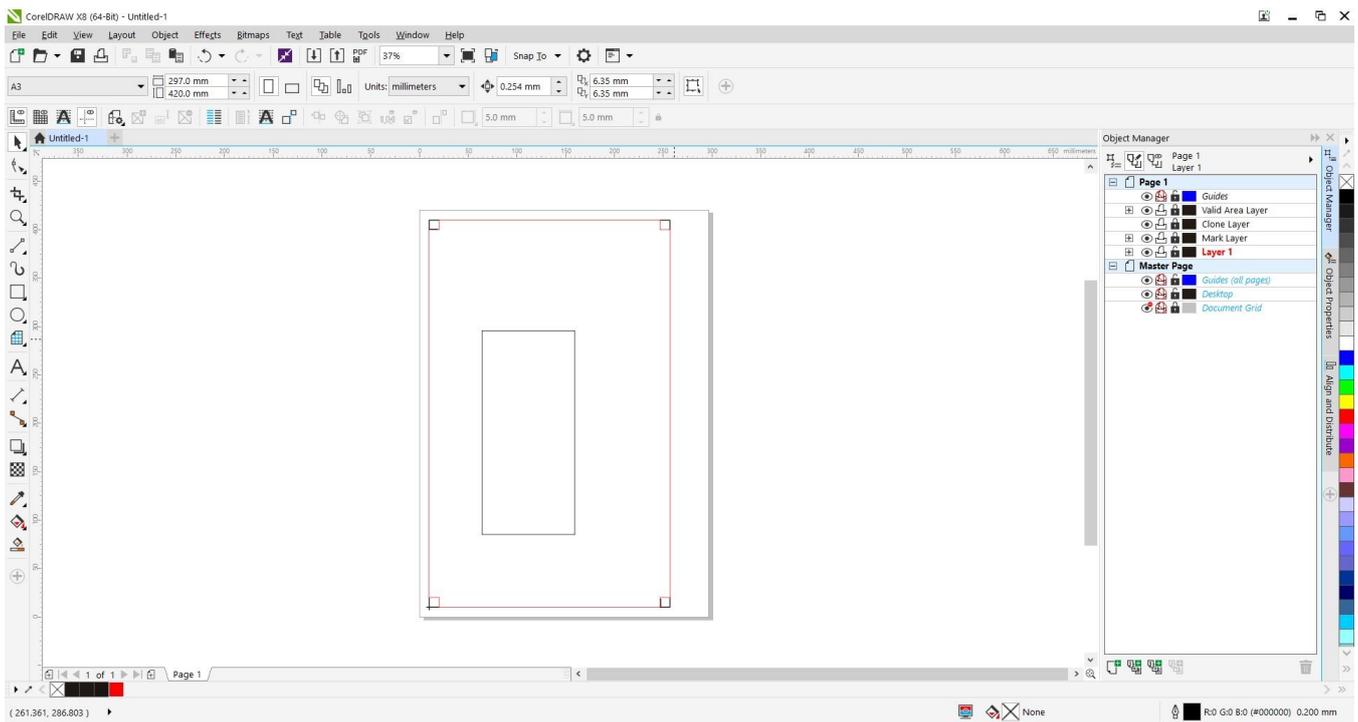




**Step 3** Select whether you would like to add the registration marks by page size or “Draw working area” to create a red line frame along with the registration mark to prevent the printed image falling out of the boundary, and click on “Apply”.

**Note:** “Add Registration Mark by Object” will be the default selection if you click on the image whereas “Add Registration Mark by page size” will be the default one when the blank area on the page is clicked.

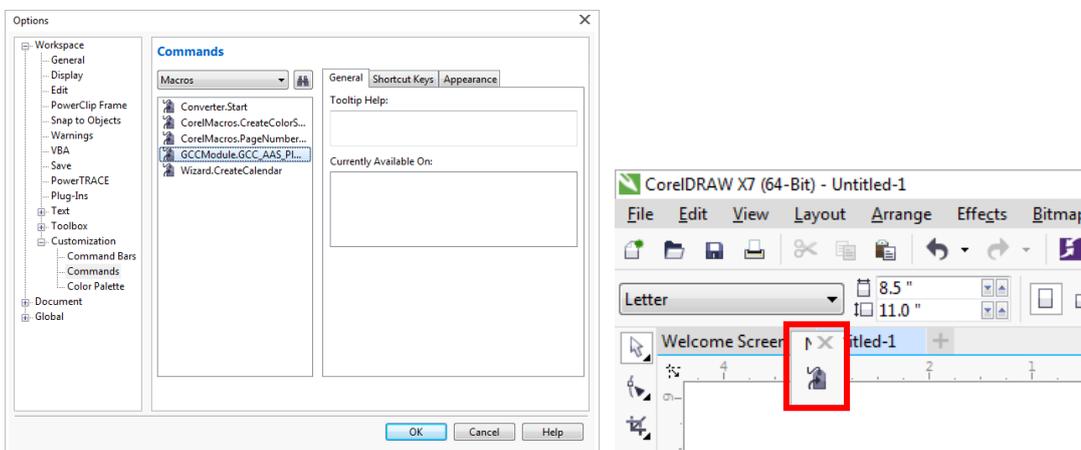




**Step 4** Now you can print out the image file with registration marks.

## You can also add a Hot Icon for the AAS Plug-in

Select “Tools→ Options→ Workspace→ Customization→ Commands→ Macros→ GCCMadual.GCC\_AAS\_Plug\_In” and Click OK.



## Add Registration Mark by page size

If you tick “Add Registration Mark by page size” as shown in the figure below and click “Apply”, your registration marks will be created automatically (please see Figure A3-1).

### Note:

1. The length setting will be in the range of 5-25mm according to your page size.
2. Please **DO NOT** make any changes to the “Origin” section when you choose to add registration marks by page size as indicated below otherwise the position of the marks will be changed (please see Figure A3-2).

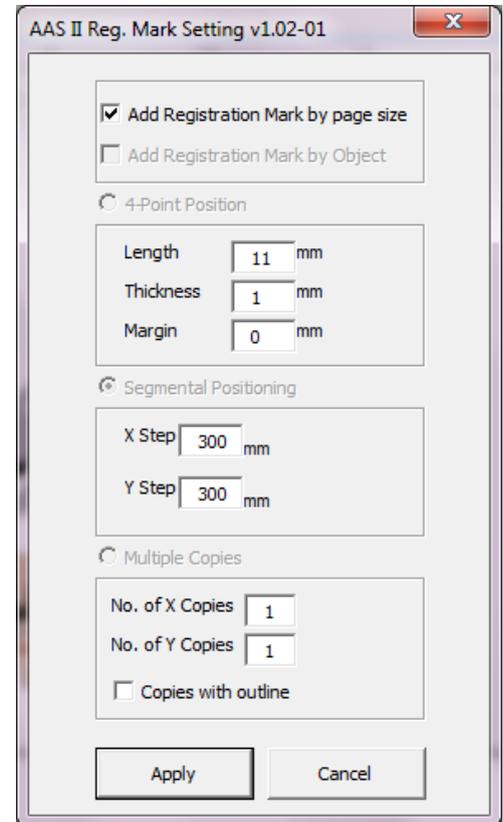


Figure A3-1

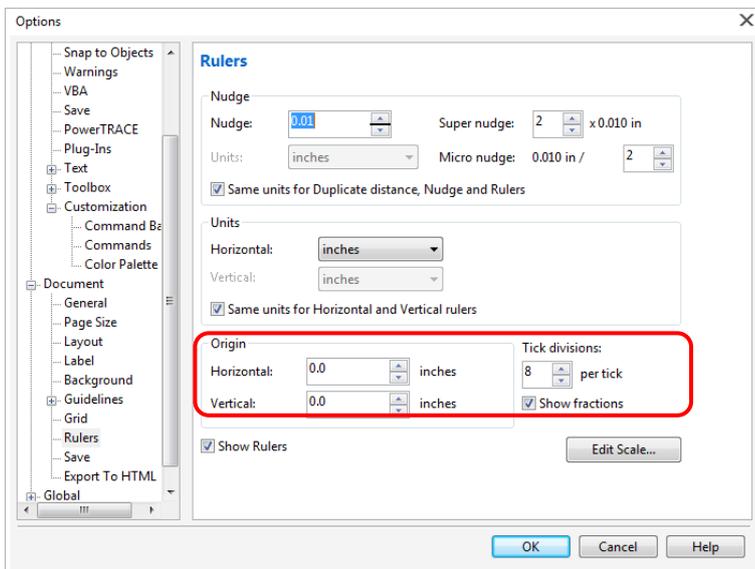


Figure A3-2

The system will create the 4 marks on the 4 corners of the page as shown in the picture below wherever you move your image.

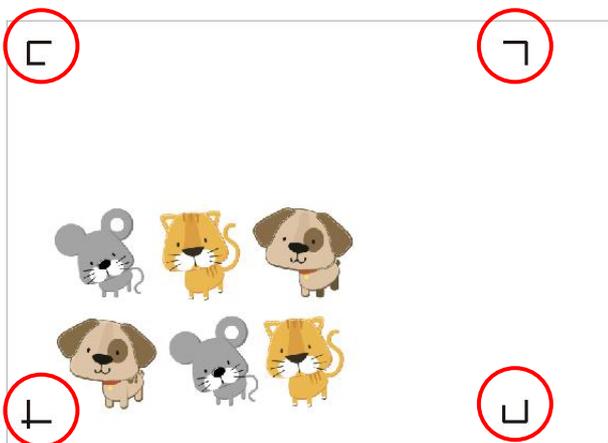


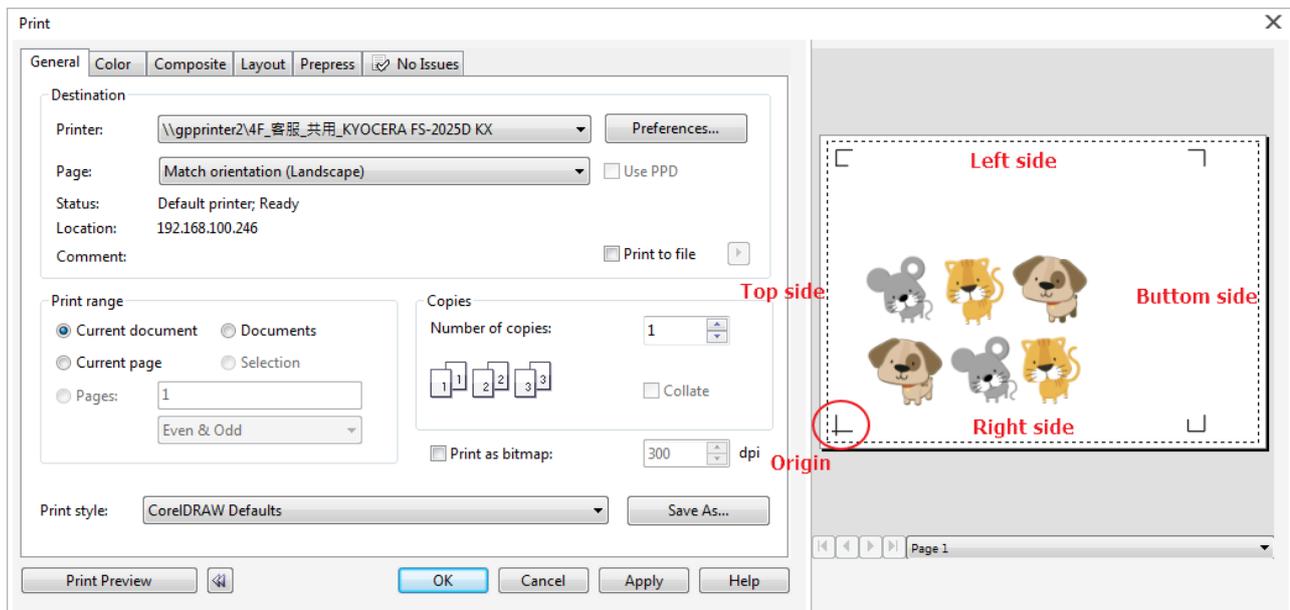
Figure A3-3

## Workable area

It allows users to edit and cut graphics in the area outside the registration marks when adding registration marks by page.

For A4 size media sheet, the workable area is 2.5mm extended from the registration mark on left and right sides and 4.5mm extended from the registration mark on top side. On the bottom side, it is suggested to leave at least 25mm margin from the edge of media sheet to prevent sheets dropping or any error occurred while media sizing.

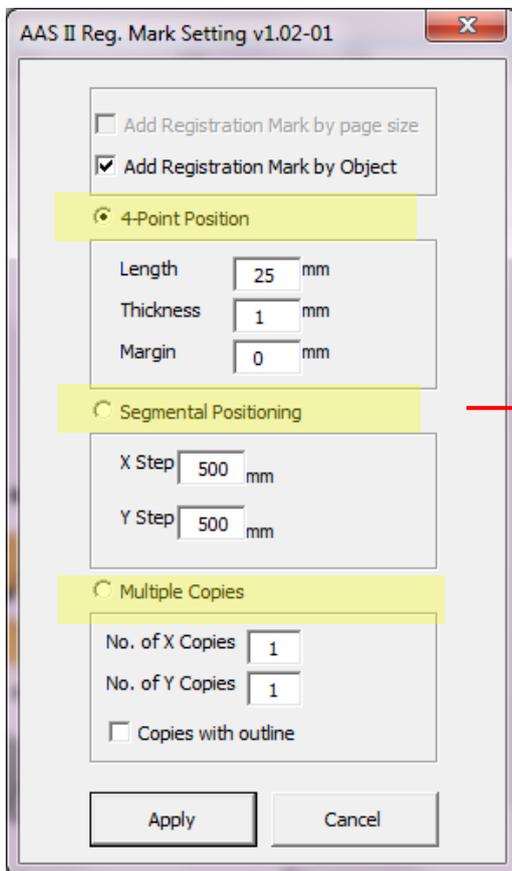
For A3 size media sheet, the workable area is 10mm extended from the registration mark on the left side, 9mm extended from the registration mark on the right side and 11mm extended from the registration mark on top side. On the bottom side, it is suggested to leave at least 25mm margin from the edge of media sheet to prevent sheets dropping or any error occurred while media sizing.



**Note:** Select “**Edge**” mode when media sizing to allow the media sheet to be unrolled. If you select “**Single**” mode, the media sheet will not be able to be moved back and hence fail to be detected by front paper sensor.

## Add Registration Mark by Object

If you tick “Add Registration Mark by Object”, you will be offered three options of registration marks as shown below.



**Figure A3-4**

### 4-Point Positioning

- Length: The length of marks  
→ Range: 5mm~50mm  
→ Optimized Setting: 25mm
- Thickness: The line thickness of marks  
→ Range: 1mm~2mm  
→ Optimized Setting: 1mm
- Margin: The distance between marks and images  
→ Range: 0mm~50mm  
→ Optimized Setting: 5mm

### Segmental Positioning

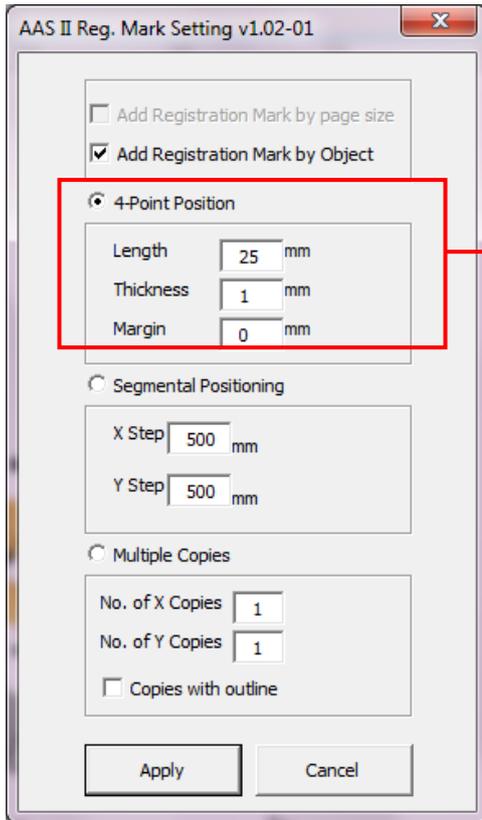
- X Step: The distance of intermediate position on the X axis
- Y Step: The distance of intermediate position on the Y axis  
→ Range: 200mm~600mm  
→ Optimized Setting: Less than 500mm

### Multiple Copies

- No. of X Copies: The numbers of copies on X axis
- No. of Y Copies: The numbers of copies on Y axis  
→ Range: 1~50. (The more copies you make, the more time is needed for data transmission.)  
→ Numbers of X Copies \* Numbers of Y Copies = The total amount of image copies
- Copies with outline: To show outlines of image graphics

**Note:** The values entered in the “4-Point Positioning” section (length, thickness and margin) will still be applied when you tick “Segmental Positioning” or “Multiple Copies”.

## 4-Point Positioning



### 4-Point Positioning

- Length: The length of marks  
→ Range: 5mm~50mm  
→ Optimized Setting: 25mm
- Thickness: The line thickness of marks  
→ Range: 1mm~2mm  
→ Optimized Setting: 1mm
- Margin: The distance between marks and images  
→ Range: 0mm~50mm  
→ Optimized Setting: 5mm

Figure A3-5

The system will create the 4 marks as shown in the picture below.

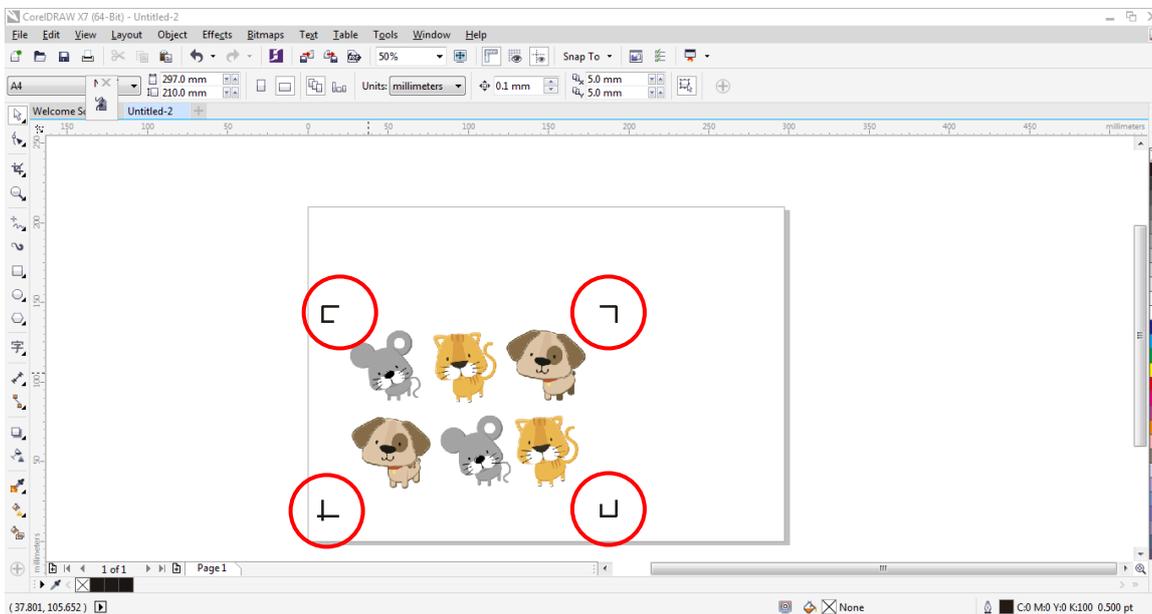
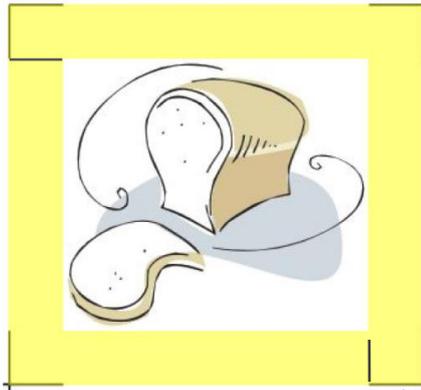


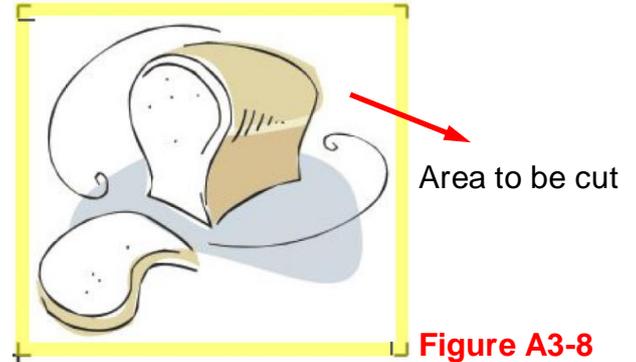
Figure A3-6

**Note:**

- To save your materials, in addition to amending object margins, you can also adjust the length of the registration marks (5mm minimum) when you apply 4-Point Positioning (see table 1 for suggestions based on different material sizes). The smaller the size is, the smaller the distance between the object and the registration marks is (see the figures below).

**Figure A3-7**

25mm

**Figure A3-8**

5mm

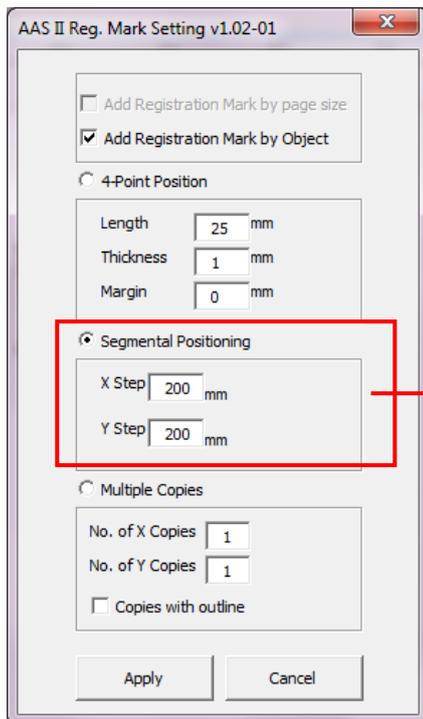
| Page size<br>(unit: mm)  | Suggested mark length<br>(unit: mm) |
|--------------------------|-------------------------------------|
| A6 (105 x 148)           | 5                                   |
| A5 (148 x 210)           | 8                                   |
| A4 (210 x 297)           | 11                                  |
| A3 (297 x 420)           | 16                                  |
| A2 (420 x 594)           | 23                                  |
| A1 (594 x 841) and above | 25*                                 |

**Table 1**

\*25mm is the suggested value for the registration mark length

- The size of the registration marks would affect the accuracy of registration mark detection so please make sure the amount you enter is reasonable.
- If you change the paper size, you will have to reset the registration marks otherwise the previous setting will be applied.

## Segmental Positioning



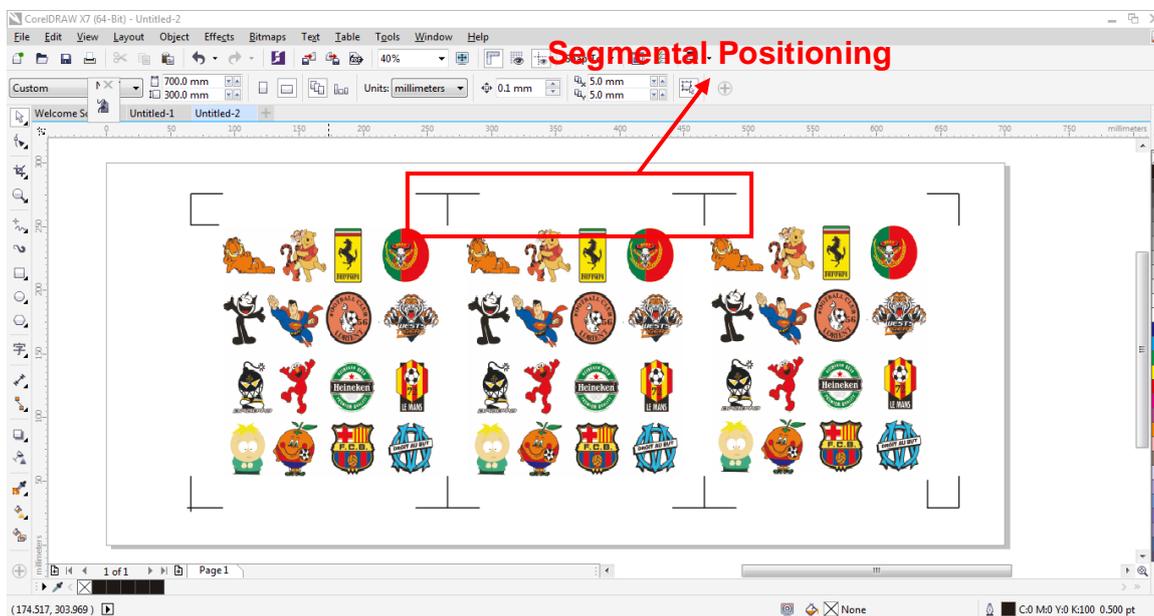
For precise cutting quality, it is suggested to select “Segmental Positioning” when you are working on an extra long or large-sized image to increase cutting accuracy.

### Segmental Positioning

- X Step: The distance of intermediate position on the X axis
- Y Step: The distance of intermediate position on the Y axis
  - Range: 200mm~600mm
  - Optimized Setting: Less than 500mm

**Figure A3-9**

The system will create the as shown in the picture below

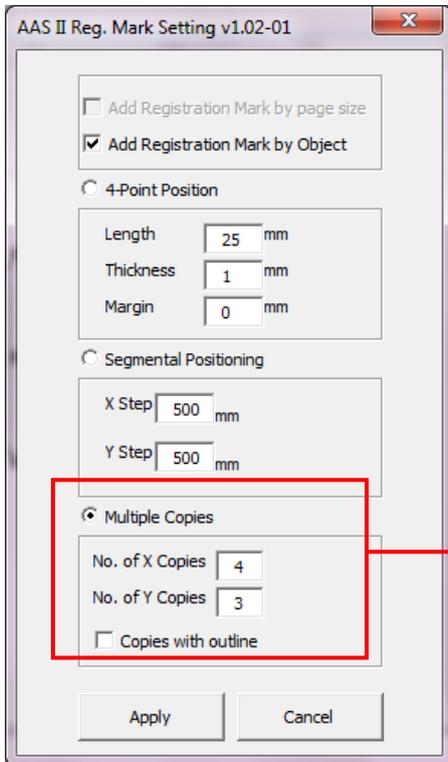


**Figure A3-10**

Segmental Positioning will be applied to Multiple Copies when the object to be copied is of large size (with the length or width over 200mm) to increase the accuracy of registration mark detection.

## Multiple Copies

It is suggested to select “Multiple Copies” when you would like to make several copies of one image on your material to increase cutting accuracy.



### Multiple Copies

- No. of X Copies: The numbers of copies on X axis
- No. of Y Copies: The numbers of copies on Y axis  
→ Range: 1~50. (The more copies you make, the more time is needed for data transmission.)  
→ Numbers of X Copies \* Numbers of Y Copies = The total amount of image copies
- Copies with outline : To show outlines of image graphics

Figure A3-11

The system will create the as shown in the picture below.

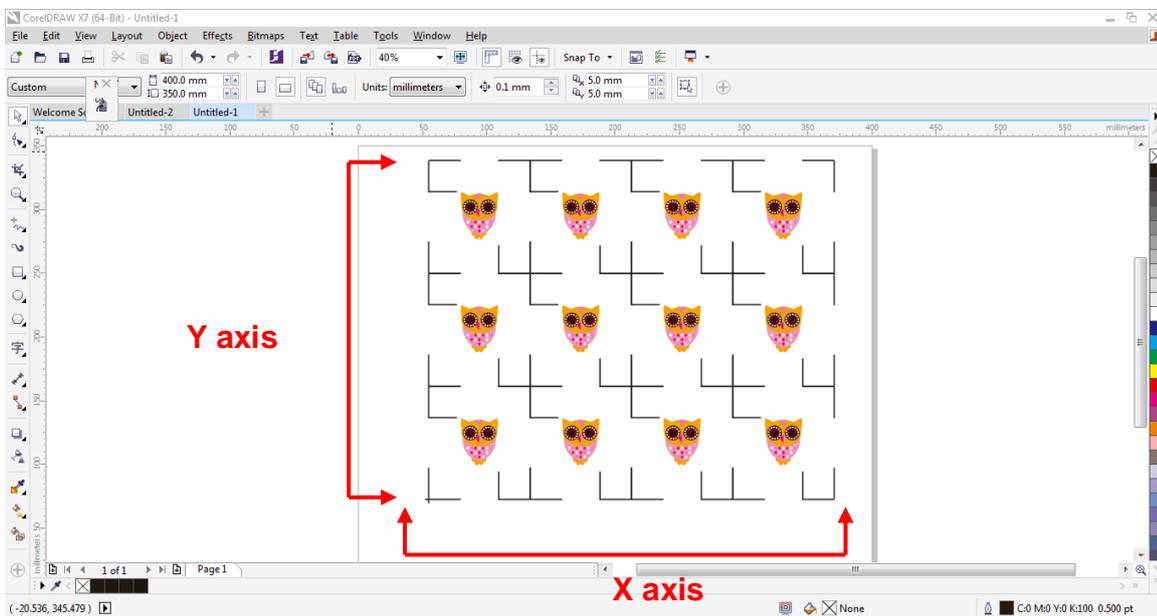
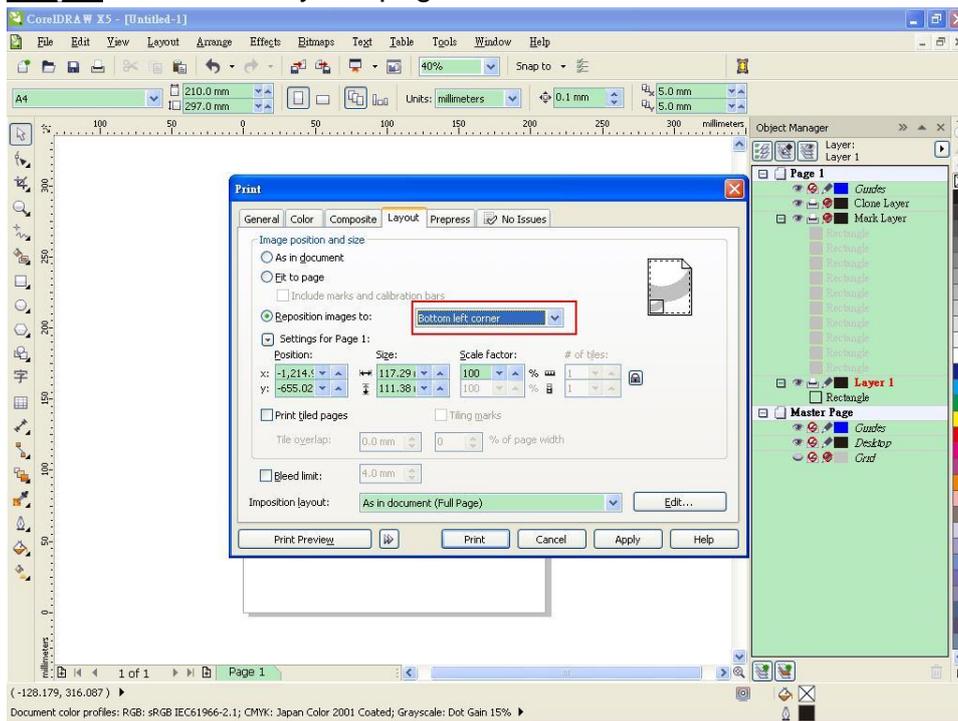


Figure A3-12



**Step 2** Go to the “Layout” page and select Bottom left corner at “Reposition images to”.



**Figure A3-15**

**Step 3** Click “Print”.

# Illustrator Plug-In Instruction

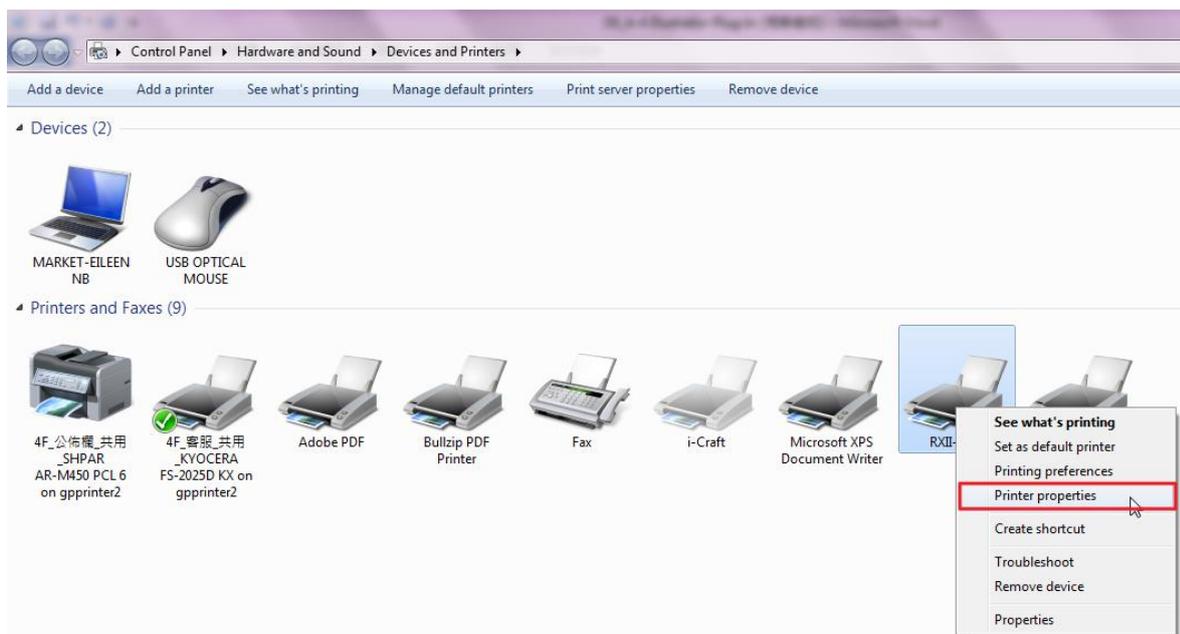
AASII VBA Installer is applicable for Adobe Illustrator Version CS4, CS5, CS6, CC.

## Installation

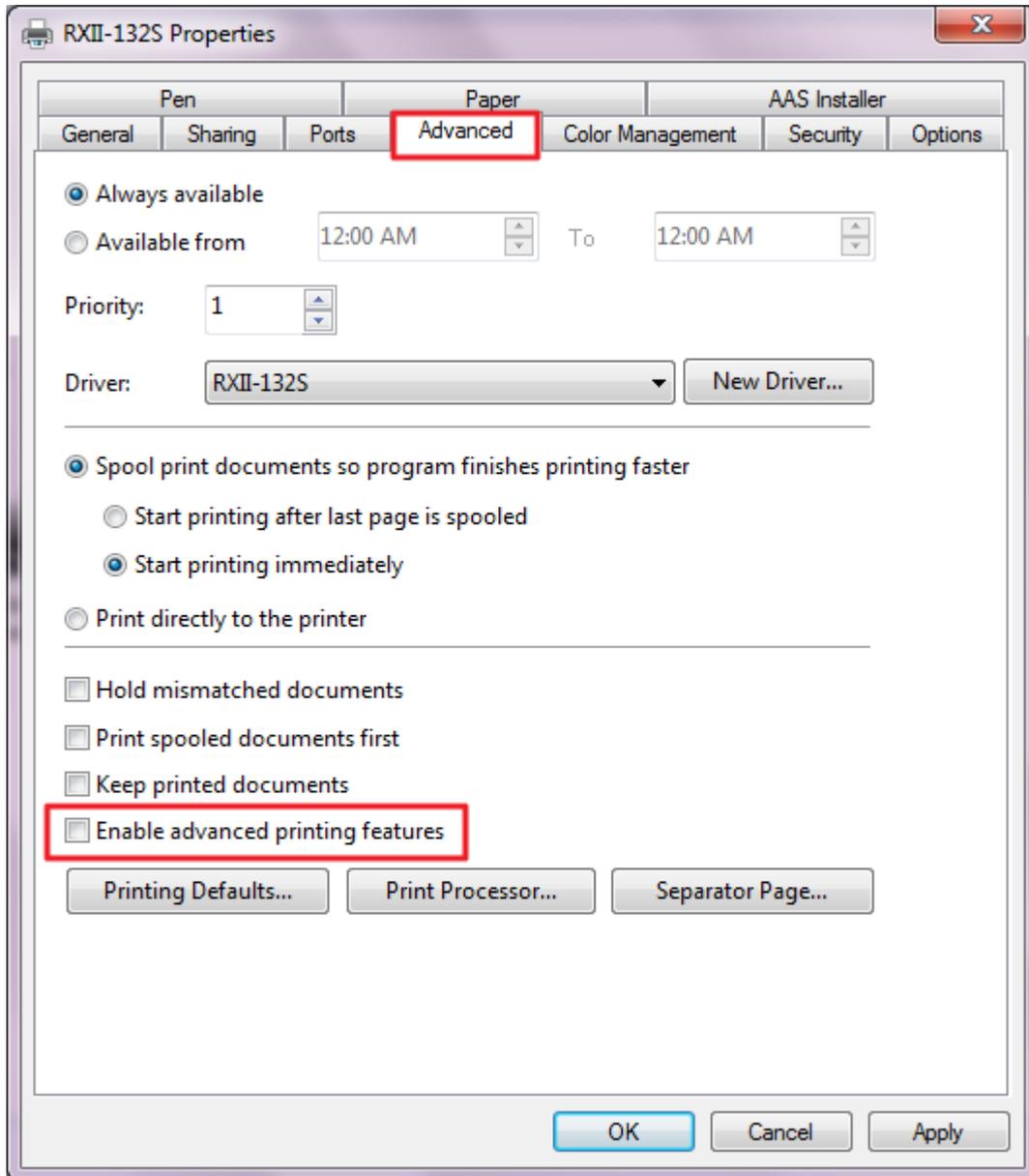
Please refer to Step 8 in Chapter 2.7.1.2 Driver Installation to install AAS plug-in for Adobe Illustrator.

## Printer Setting

**Step 1** Go to Control Panel, right click on the printer and select Printer Properties to open the Printer Properties page



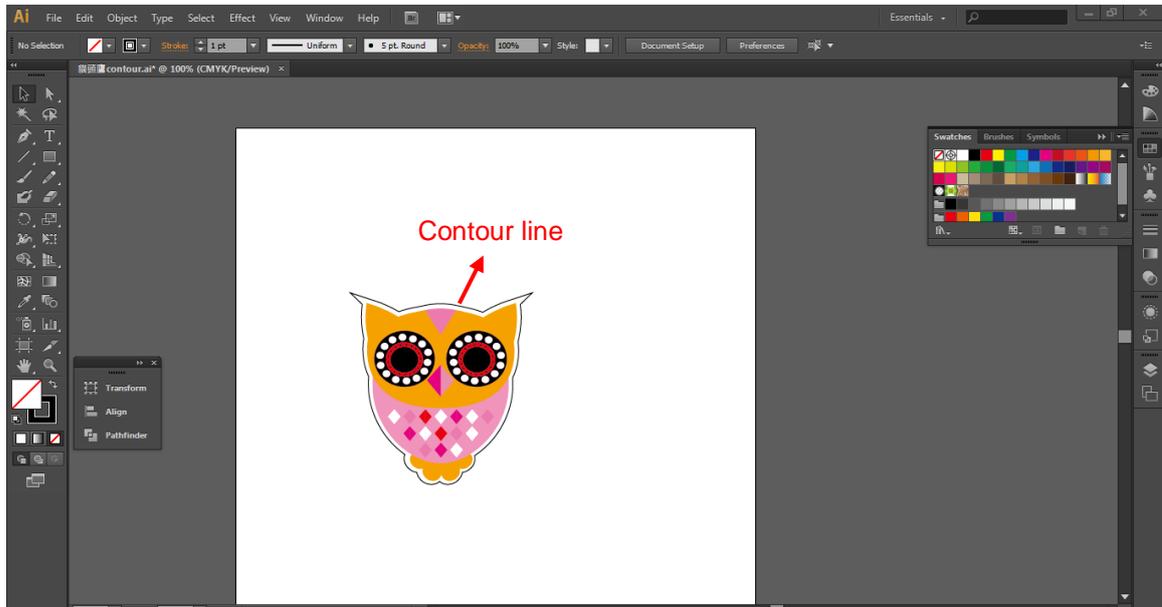
**Step 2** Go to the Advanced page and make sure the “Enable advanced printing features” box is unchecked.



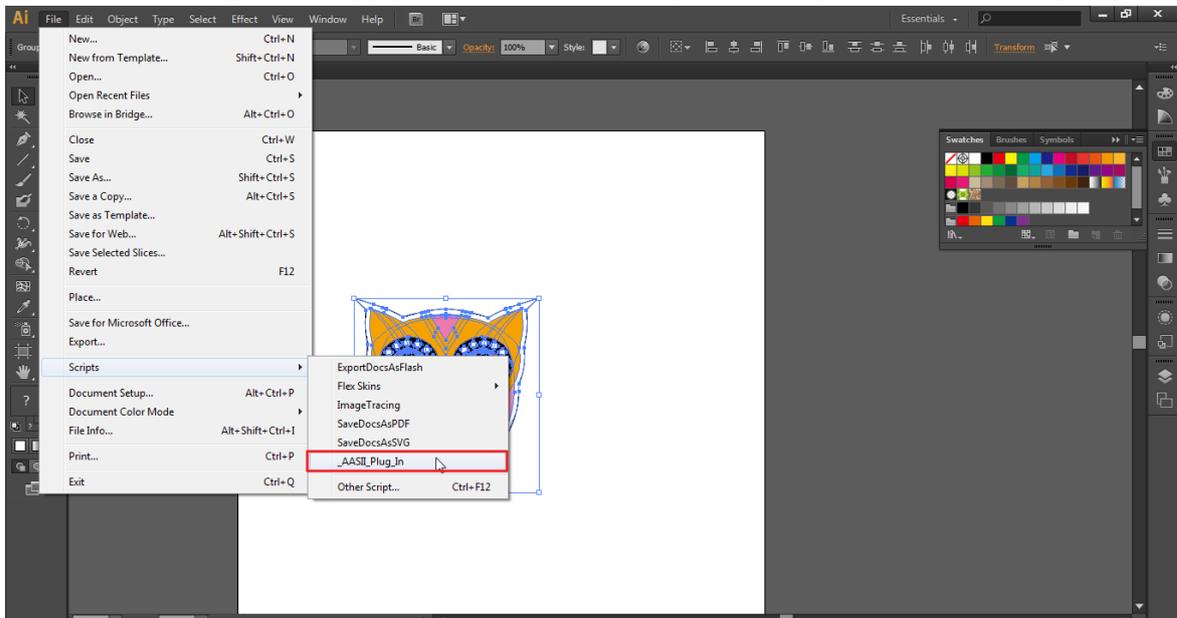
## User Instructions

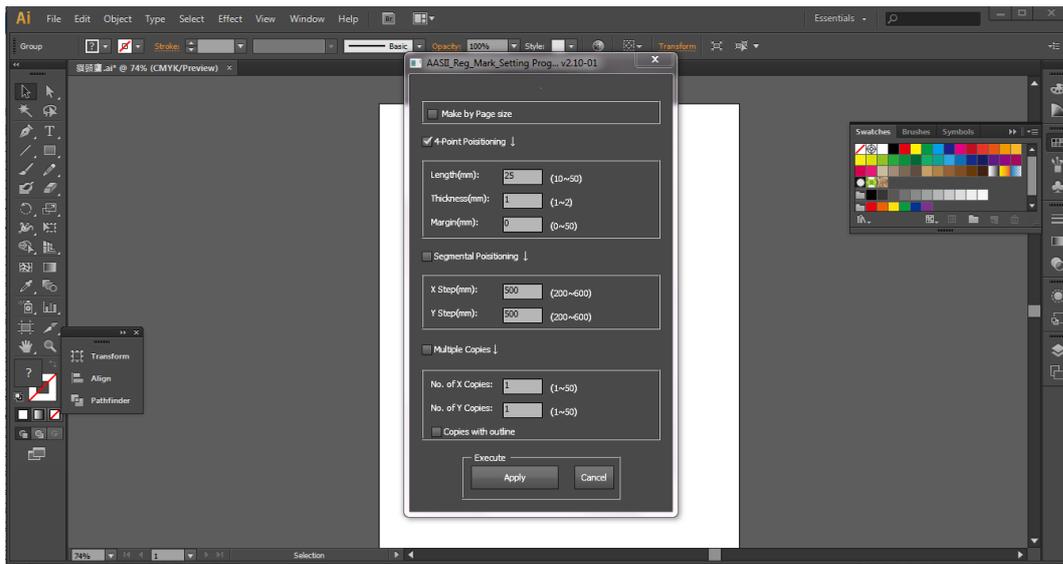
**Step 1** Open Illustrator.

**Step 2** Edit your image and create a contour line (**Note:** you must have the line width set as 0.001 mm).



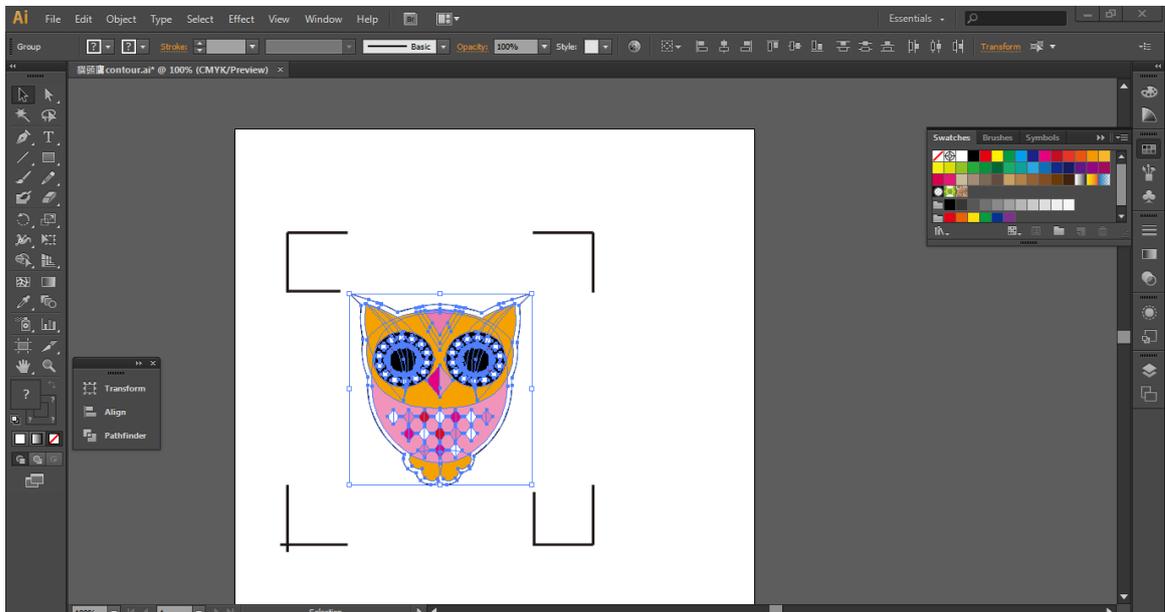
**Step 3** Click on the image and apply the AAS function (File→Scripts→\_AASII\_Plug\_In).



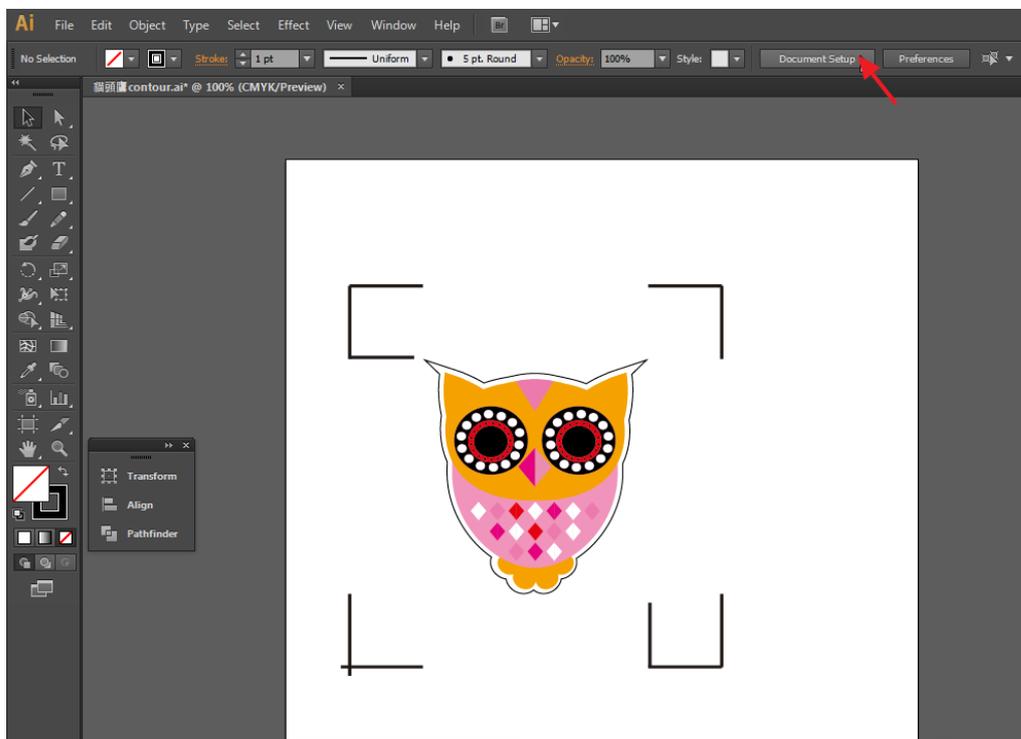
**Step 4** Select the registration marks needed**Step 5** Four types of registration marks are introduced here: 2-Point Positioning, 4-Point Positioning, Segmental Positioning and Multiple Copies.**Step 6** Confirm the registration marks (the 4-Point Position mark is used as an illustration in the following steps).

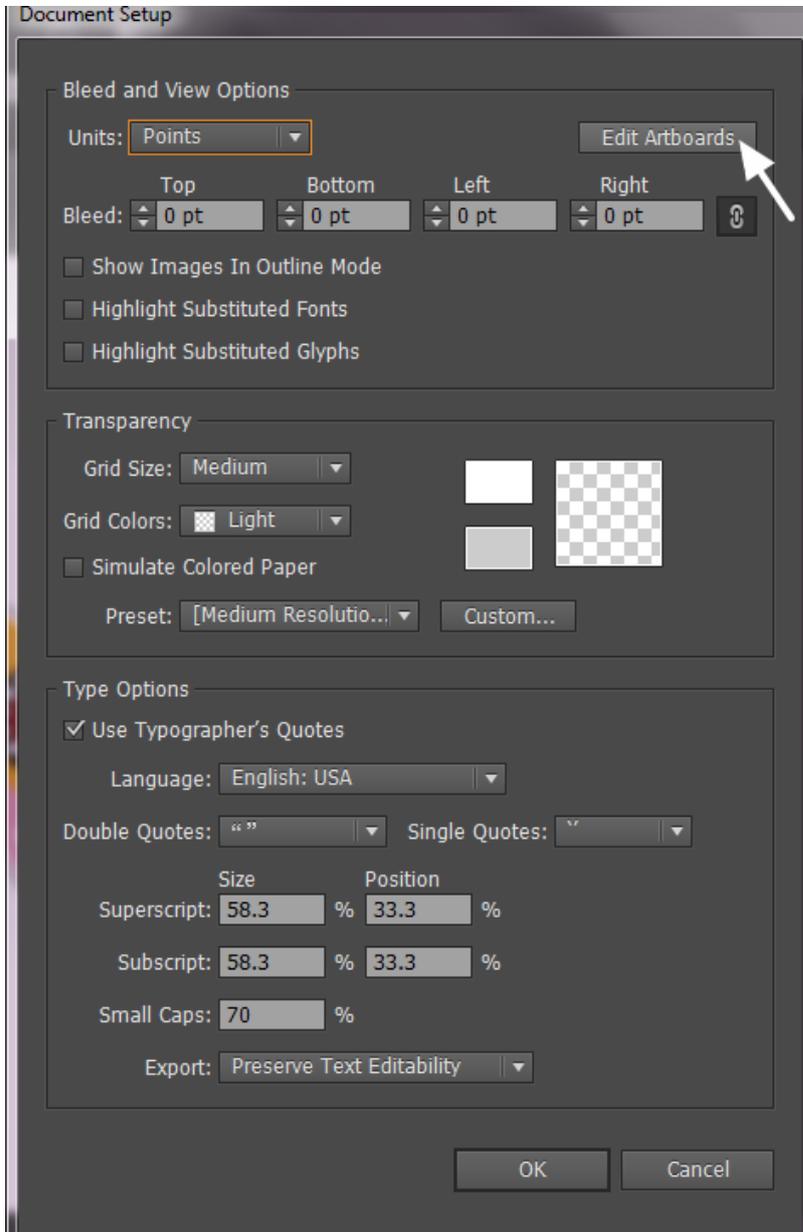
**Note:**

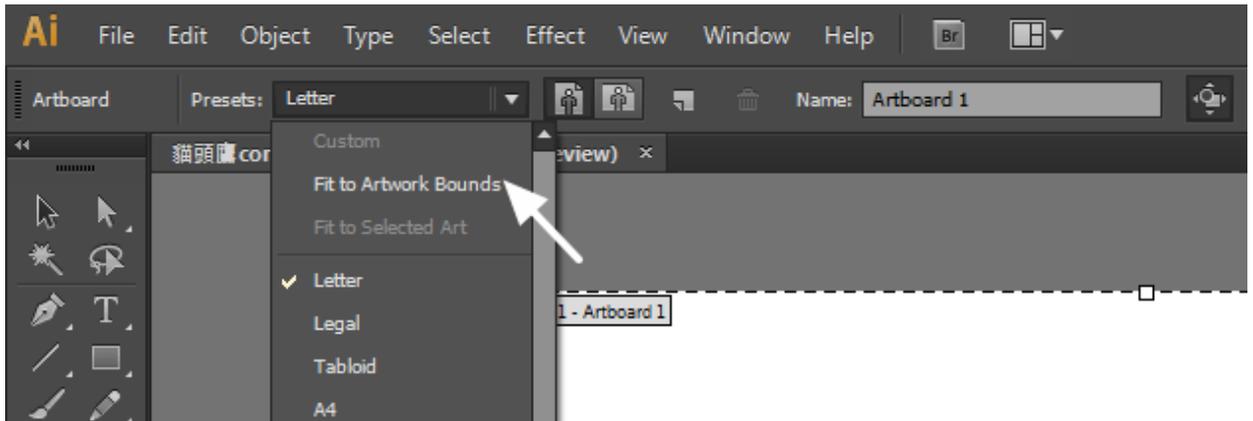
The values entered in the “4-Point Positioning” section (length, thickness and margin) will still be applied when you tick “Segmental Positioning” or “Multiple Copies.”



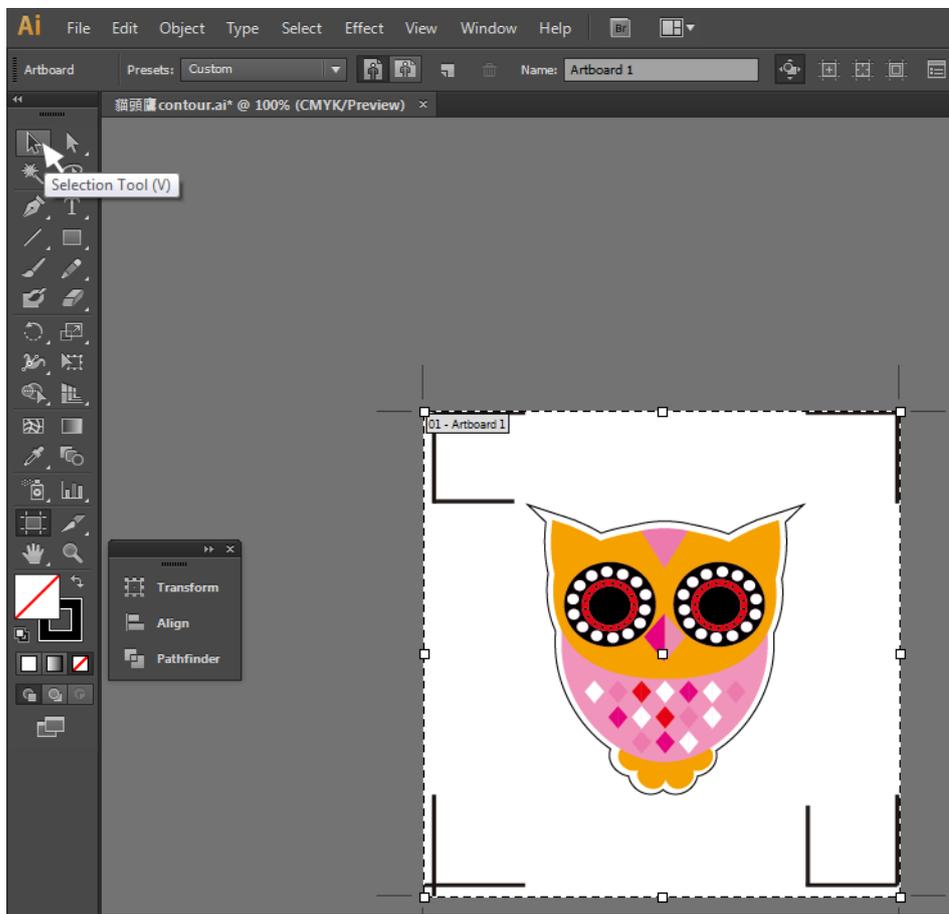
**Step 7** Click on the blank area on the page and then click “Document Setup”.



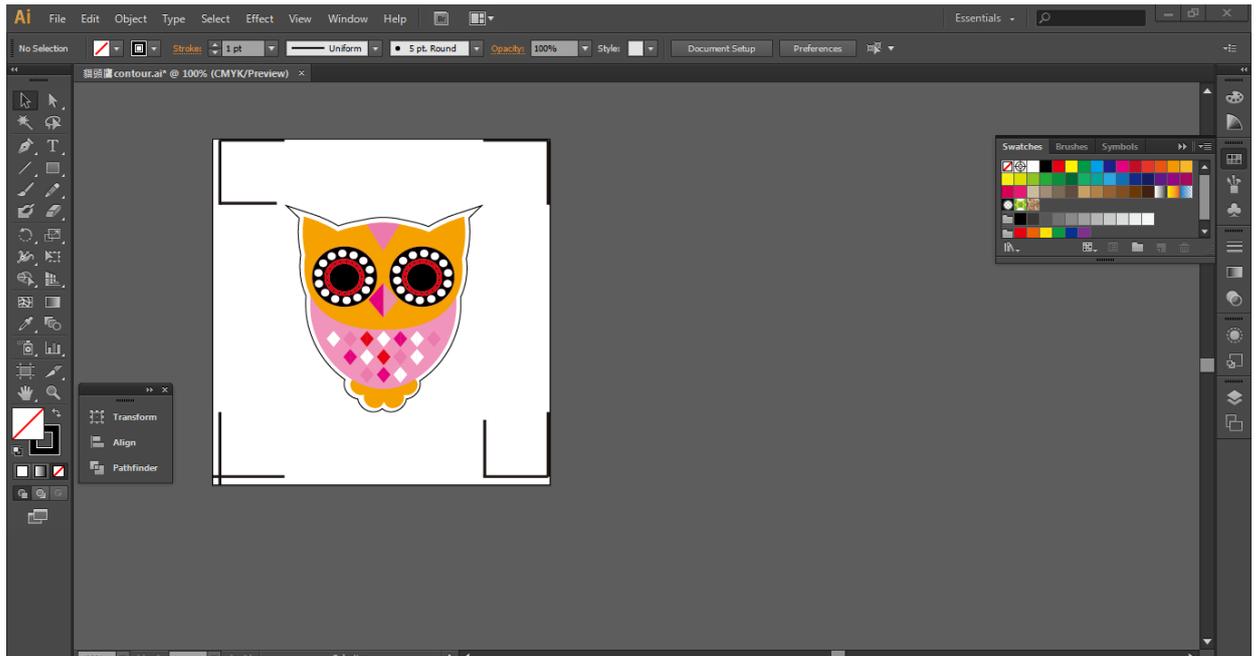
**Step 8** Hit “Edit Artboards”.**Step 9** Click on “Presets → Fit Artboard to Artwork bounds”.



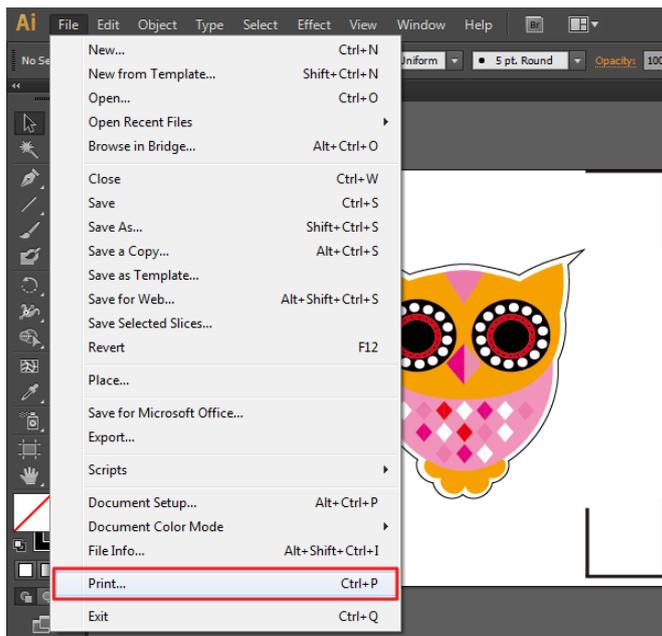
**Step 10** Please move your mouse to the tool bar on the left when step 9 is finished and then click “Selection Tool”.



**Step 11** This will take you back to the edit mode.

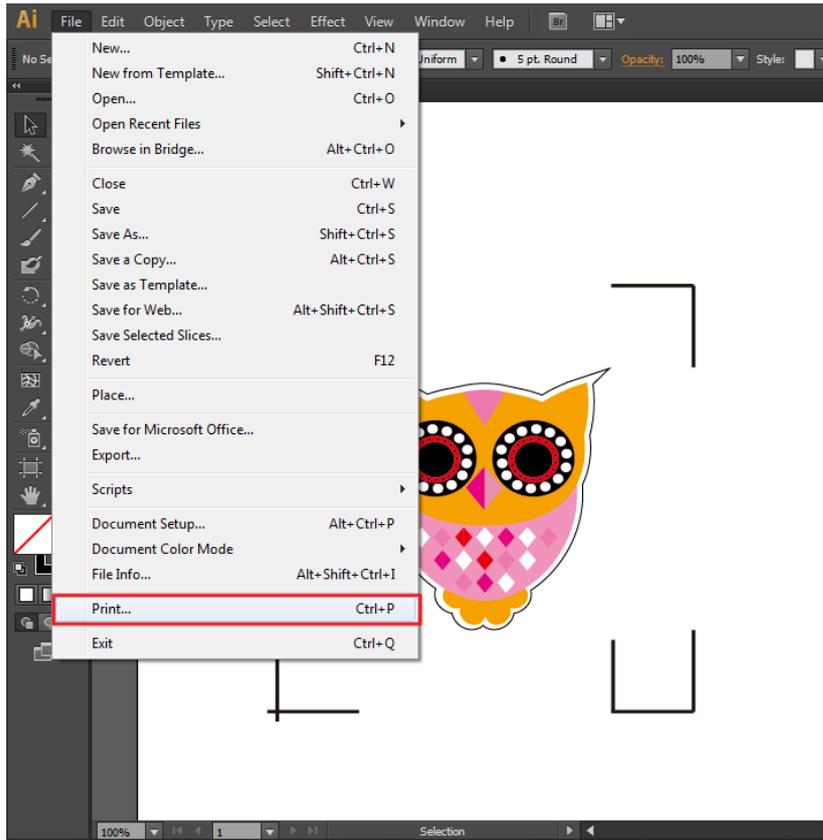


**Step 12** Print out the file with the contour line and the registration marks.

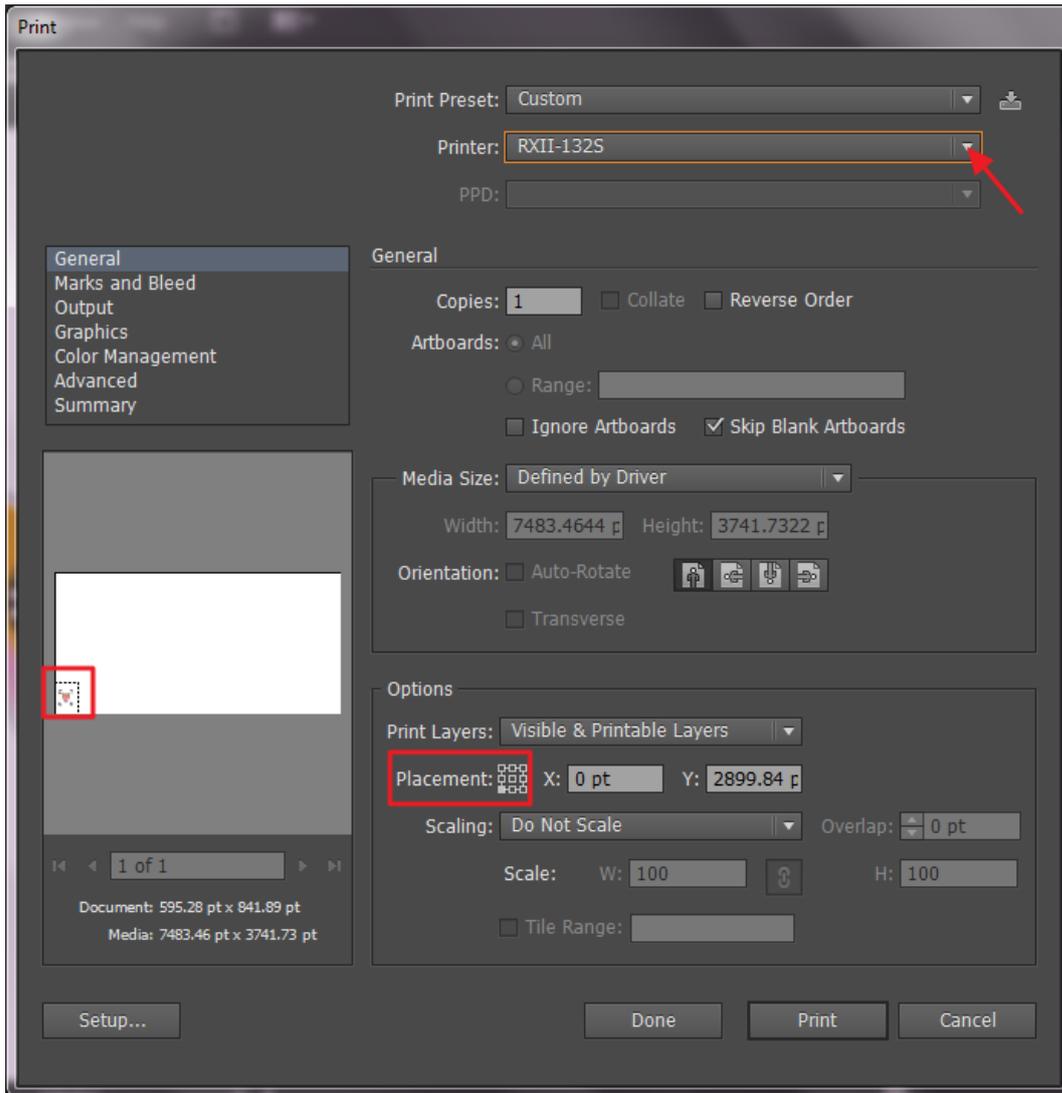


**Step 13** Place the printed file on the cutter, lower the pinch rollers and then position the carriage at the origin of the registration marks.

**Step 14** Send the file to the cutter.



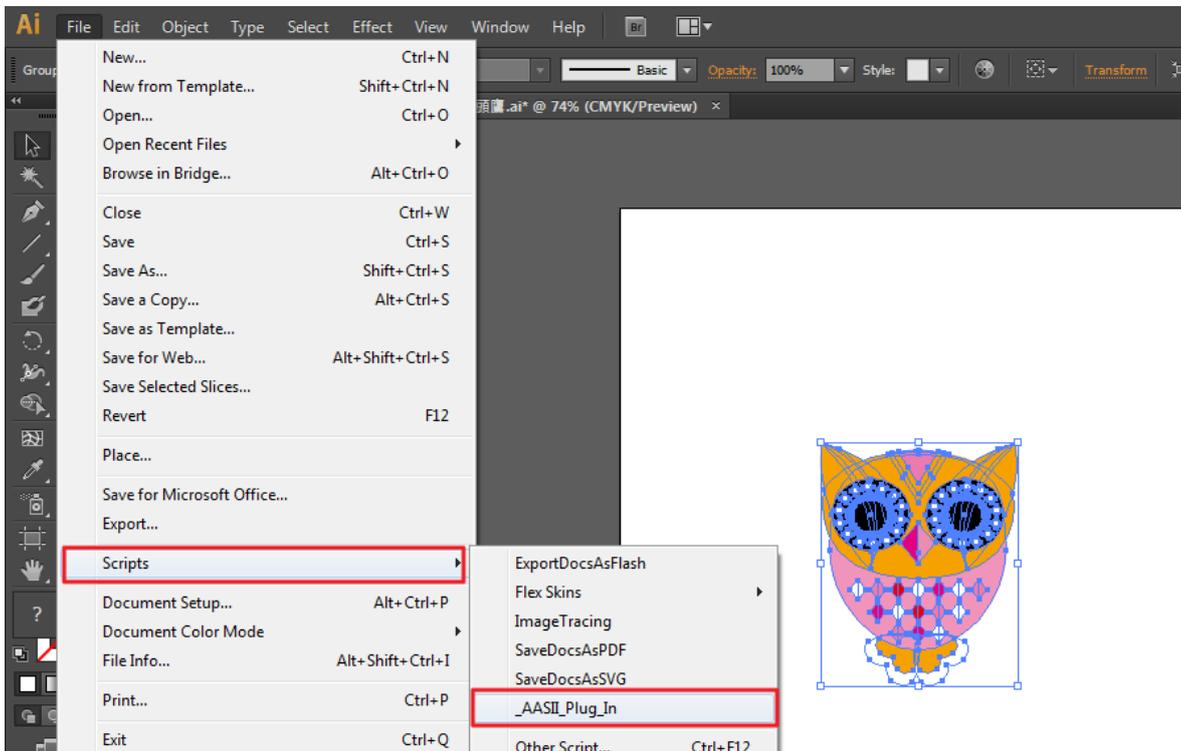
**Step 15** Select the cutter model, position the object in the bottom left corner.



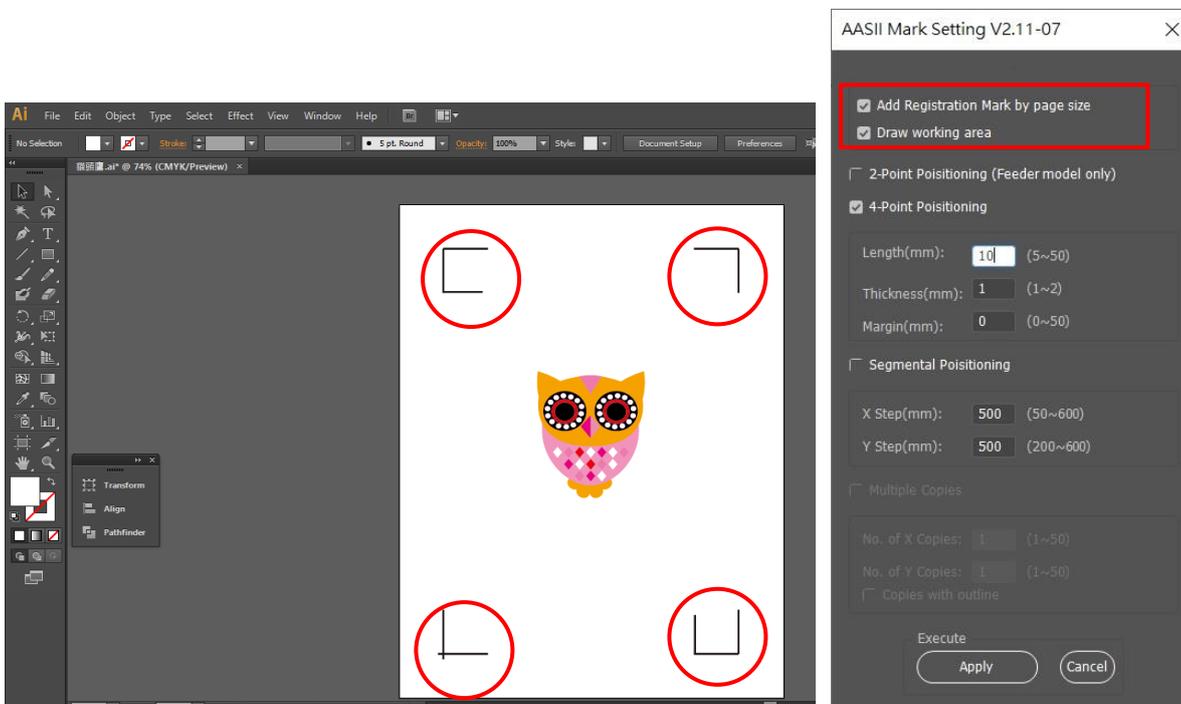
**Step 16** Your job is now completed.

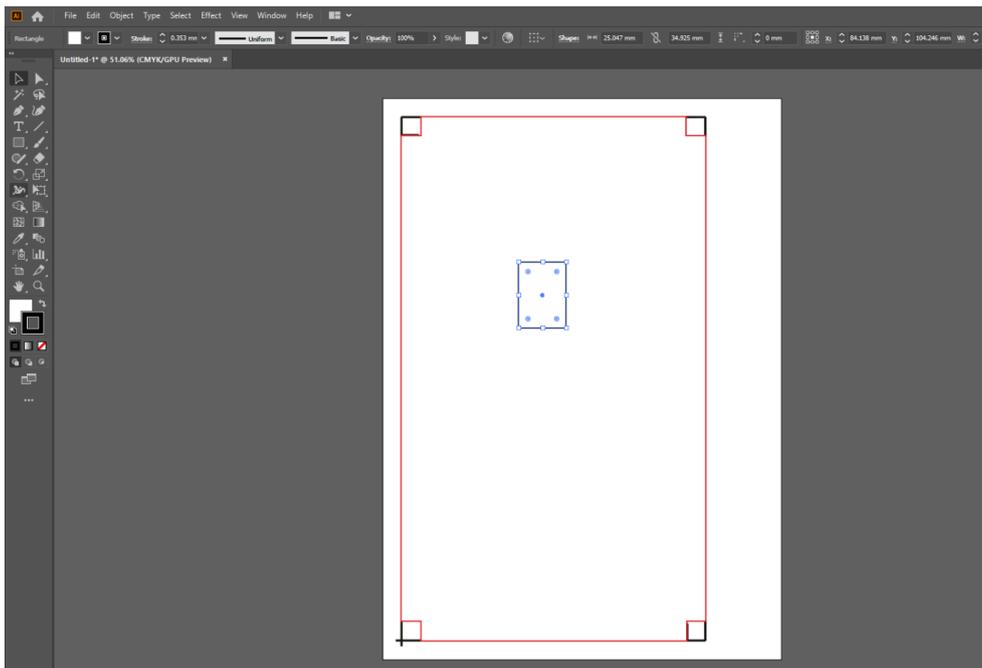
## Add Registration Mark by page size

If you want to create registration mark by page size, select the object, go to “Scripts” under “File” and select “\_AASII\_Plug\_In”



Select “Add the registration marks by page size” and “Draw working area” to create a red line frame along with the registration mark to prevent the printed image falling out of the boundary, and click on “Apply”.



**Note:**

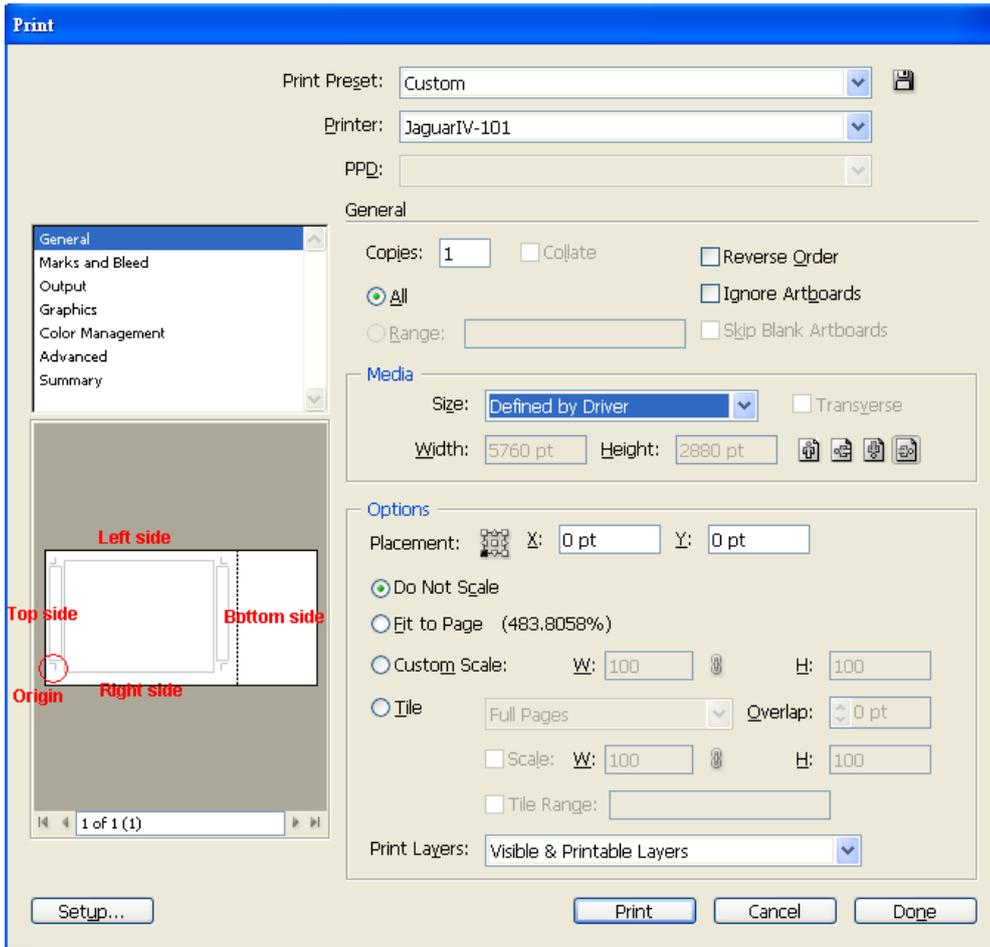
The length setting will be in the range of 10-50mm according to your page size.

**Workable area**

It allows users to edit and cut graphics in the area outside the registration marks when adding registration marks by page.

For A4 size media sheet, the workable area is 2.5mm extended from the registration mark on left and right sides and 4.5mm extended from the registration mark on top side. On the bottom side, it is suggested to leave at least 25mm margin from the edge of media sheet to prevent sheets dropping or any error occurred while media sizing.

For A3 size media sheet, the workable area is 10mm extended from the registration mark on the left side, 9mm extended from the registration mark on the right side and 11mm extended from the registration mark on top side. On the bottom side, it is suggested to leave at least 25mm margin from the edge of media sheet to prevent sheets dropping or any error occurred while media sizing.

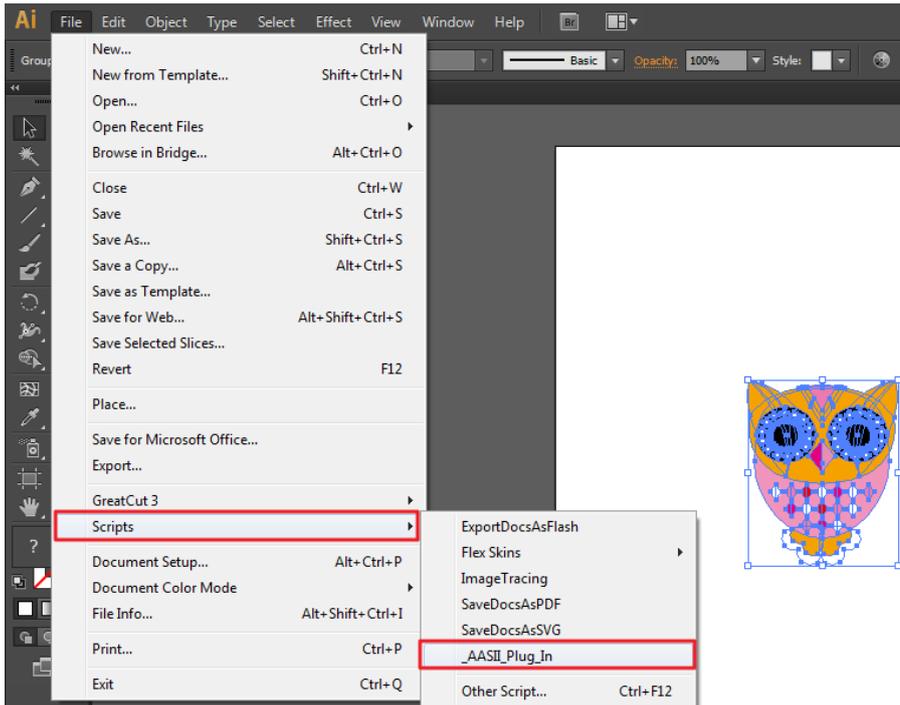


**Note:** Select “Edge” mode when media sizing to allow the media sheet to be unrolled. If you select “Single” mode, the media sheet will not be able to be moved back and hence fail to be detected by front paper sensor.

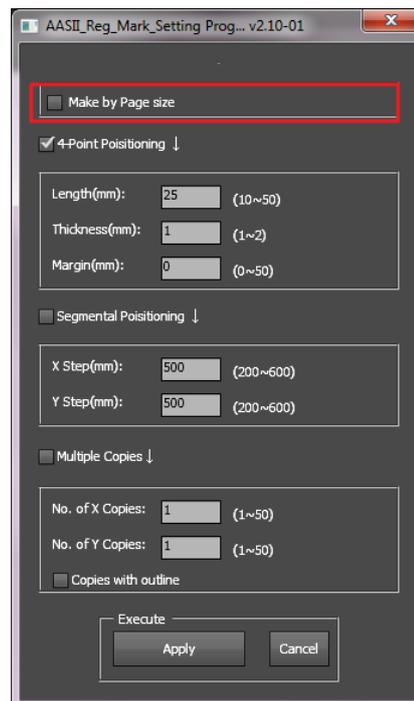
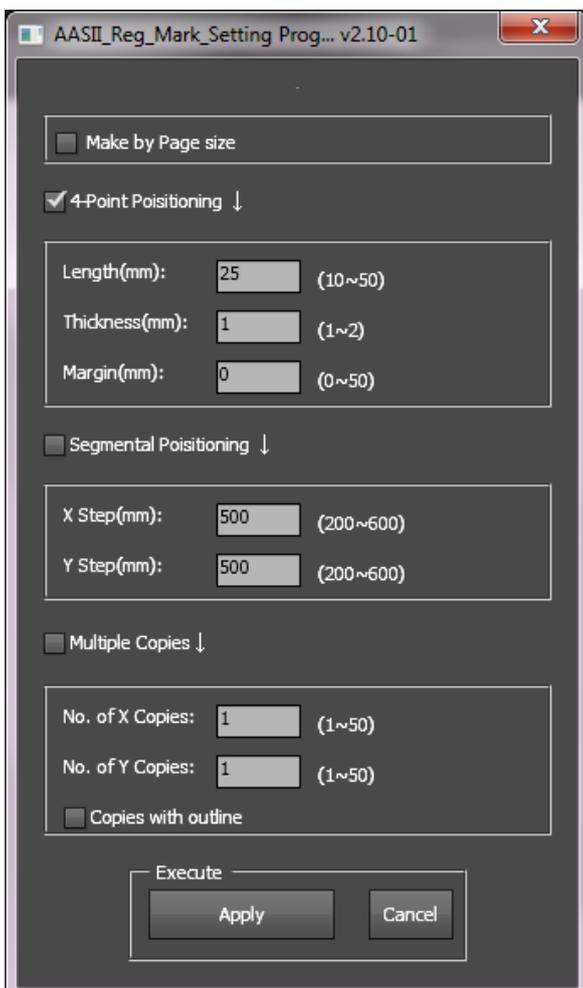
## Add Registration Mark by Object

If you add registration mark by Object, you will be offered three options of registration marks.

Firstly, select the graphic which you want to add registration mark on and go to “Scripts” under “File” and select “\_AASII\_Plug\_In”.



Make sure to untick “Make by page size” and choose one of the registration mark types whichever is suitable.



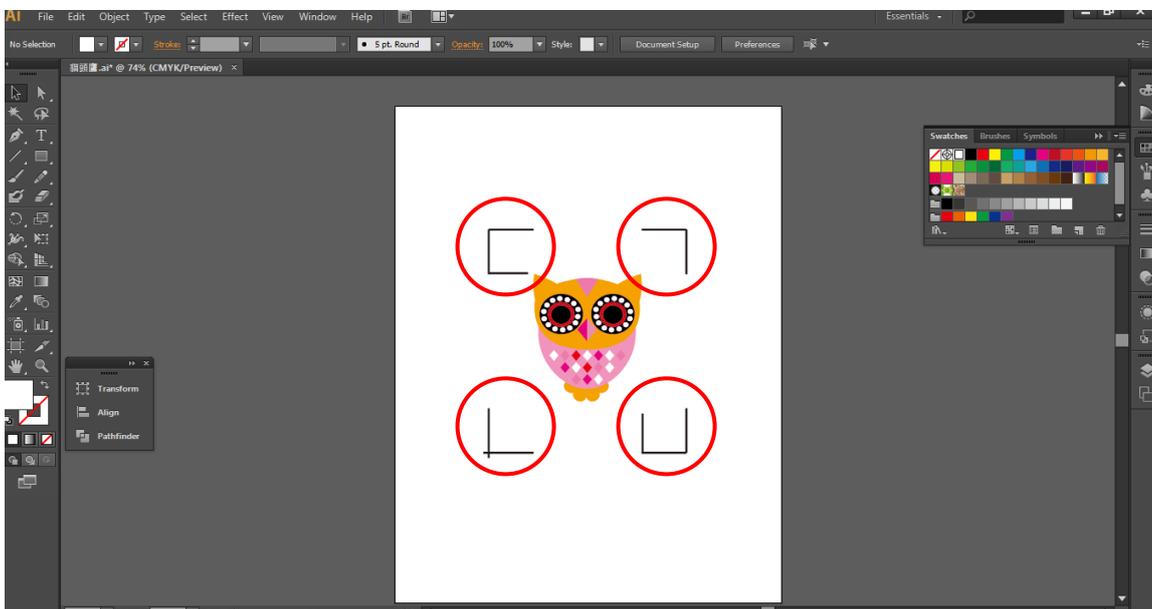
## Three types of registration marks

### 4-Point Positioning

#### 4-Point Positioning

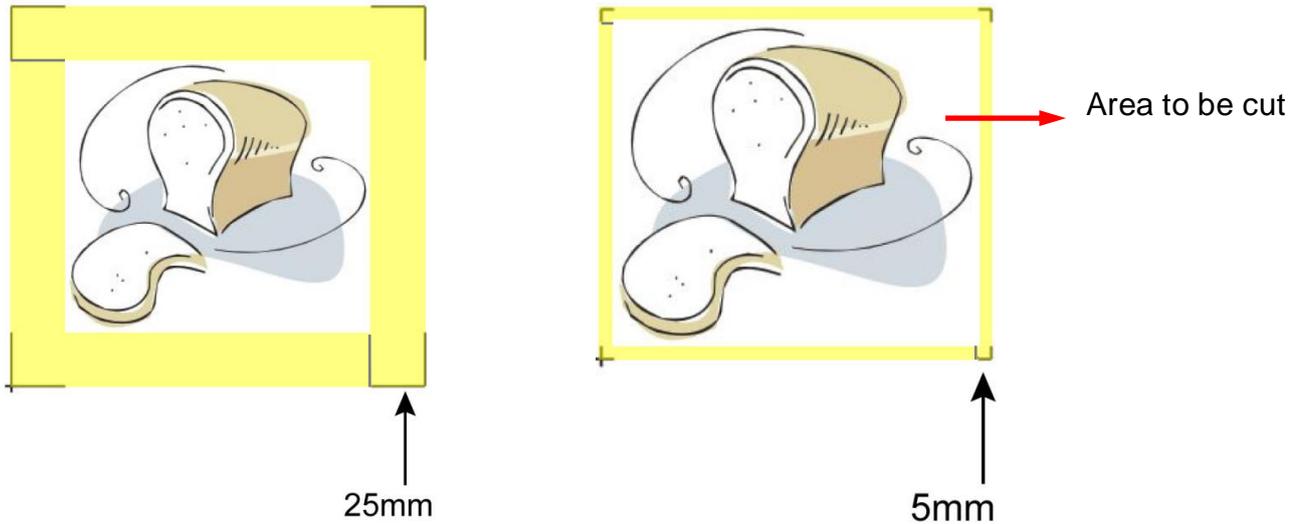
- Length: The length of marks  
→ Range: 5mm~50mm  
→ Optimized Setting: 25mm
- Thickness: The line thickness of marks

The system will create the 4 marks as shown in the picture below.



**Note:**

1. To save your materials, in addition to amending object margins, you can also adjust the length of the registration marks (5mm minimum) when you apply 4-Point Positioning (see table 1 for suggestions based on different material sizes). The smaller the size is, the smaller the distance between the object and the registration marks is (see the figures below).



| Page size<br>(unit: mm)  | Suggested mark length<br>(unit: mm) |
|--------------------------|-------------------------------------|
| A6 (105 x 148)           | 5                                   |
| A5 (148 x 210)           | 8                                   |
| A4 (210 x 297)           | 11                                  |
| A3 (297 x 420)           | 16                                  |
| A2 (420 x 594)           | 23                                  |
| A1 (594 x 841) and above | 25*                                 |

Table 1

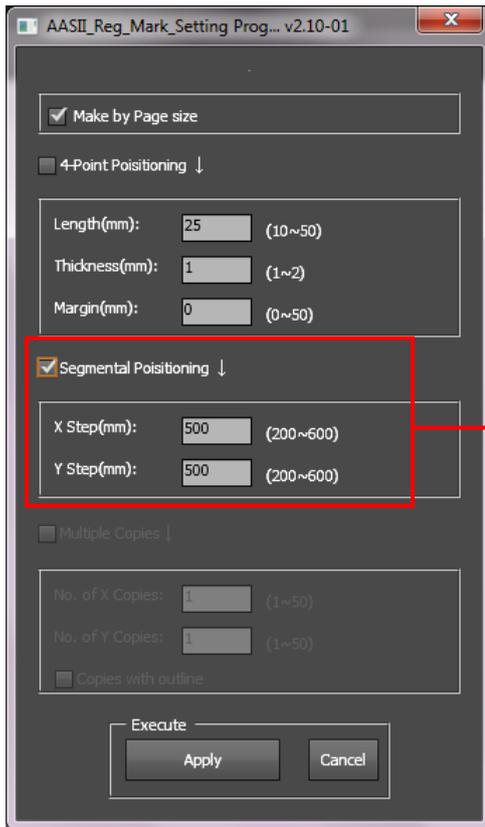
\*25mm is the suggested value for the registration mark length

2. The size of the registration marks would affect the accuracy of registration mark detection so please make sure the amount you enter is reasonable.

3. If you change the paper size, you will have to reset the registration marks otherwise the previous setting will be applied.

### Segmental Positioning

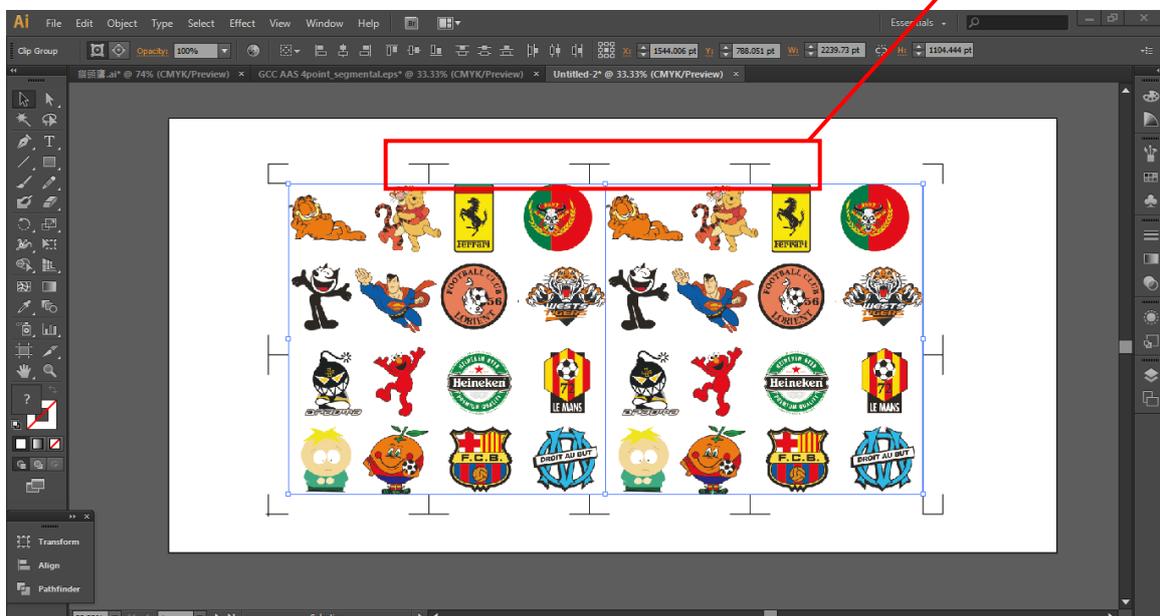
For precise cutting quality, it is suggested to select “Segmental Positioning” when you are working on an extra long or large-sized image to increase cutting accuracy.



### Segmental Positioning

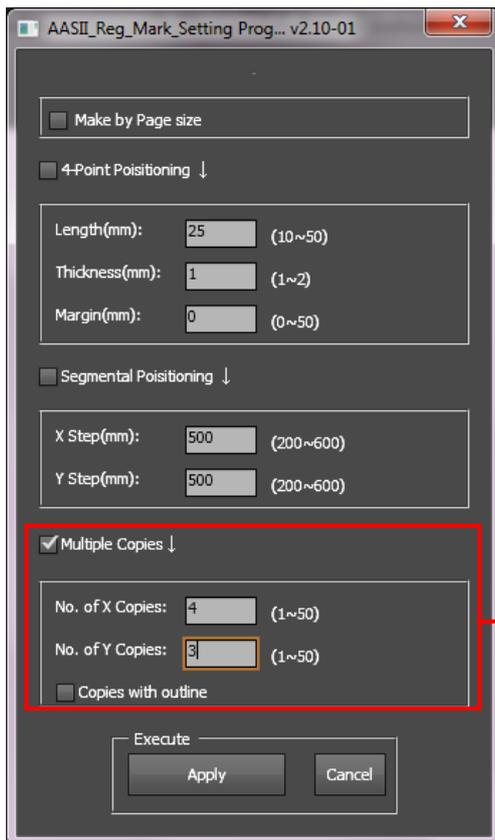
- X Step: The distance of intermediate position on the X axis
- Y Step: The distance of intermediate position on the Y axis
  - Range: 200mm~600mm
  - Optimized Setting: Less than 500mm

The system will create the marks as shown in the picture below.



### Multiple Copies

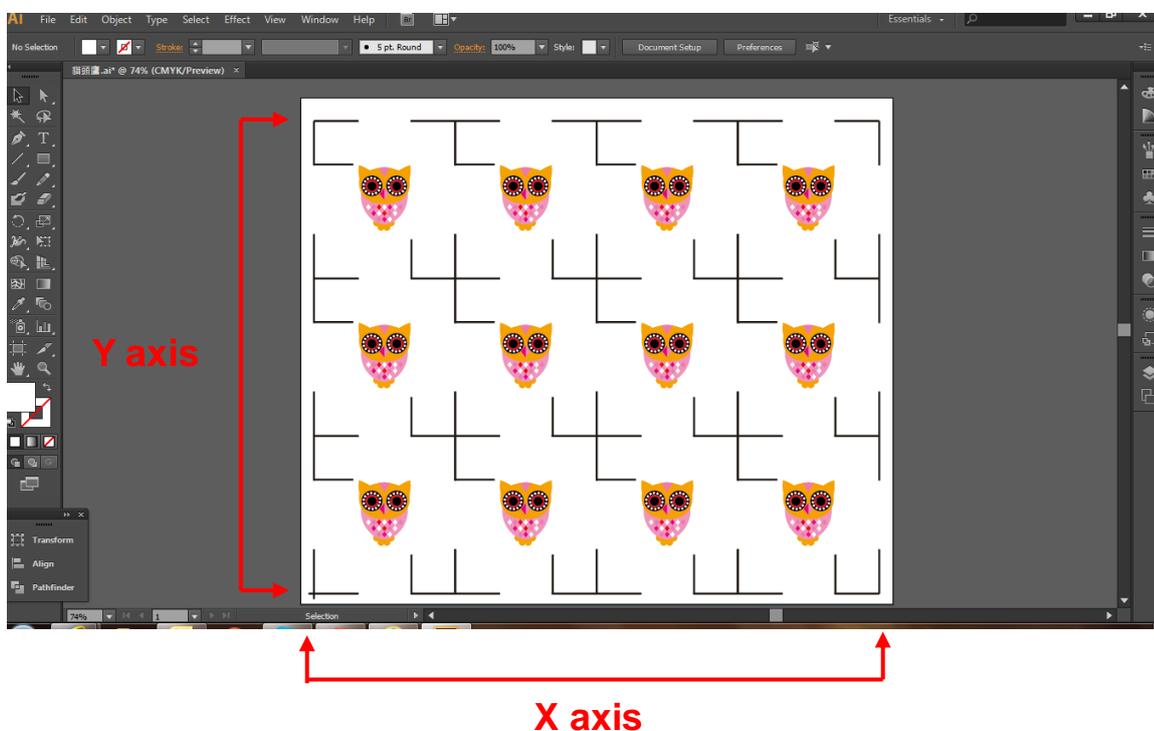
It is suggested to select “Multiple Copies” when you would like to make several copies of one image on your material to increase cutting accuracy.



### Multiple Copies

- No. of X Copies: The numbers of copies on X axis
- No. of Y Copies: The numbers of copies on Y axis  
→ Range: 1~50. (The more copies you make, the more time is needed for data transmission.)  
→ Numbers of X Copies \* Numbers of Y Copies = The total amount of image copies
- Copies with outline : To show outlines of image graphics
- Margin: Space between marks; must be 0 or  $\geq 20$ , no negative numbers allowed

The system will create the as shown in the picture below.

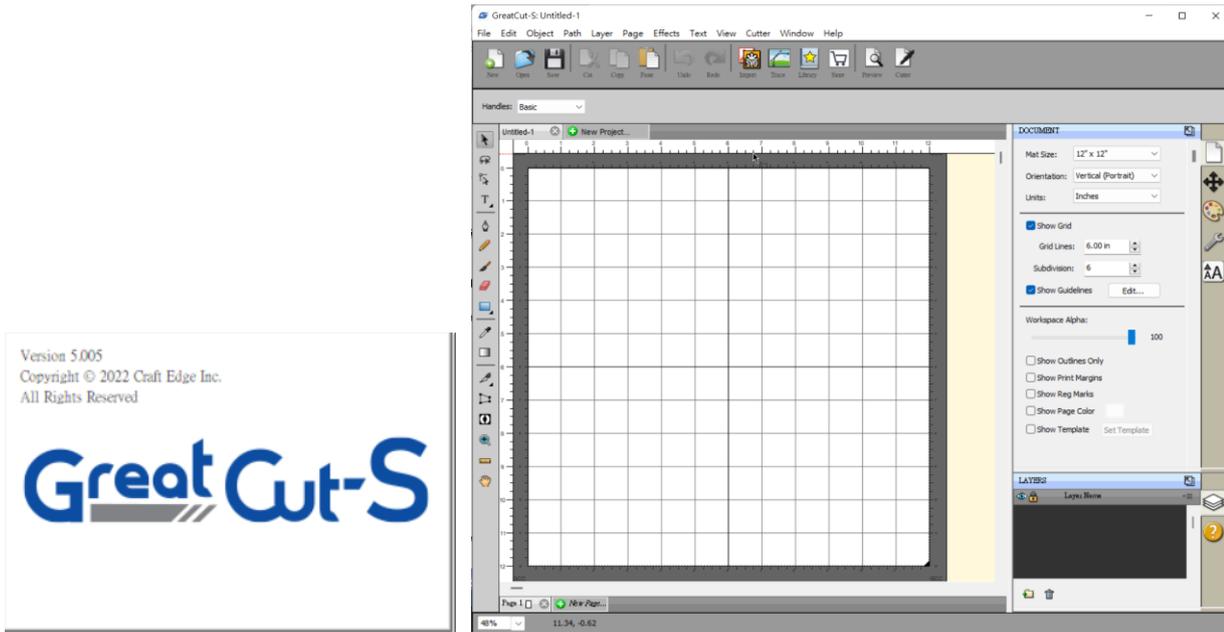


# GreatCut-S

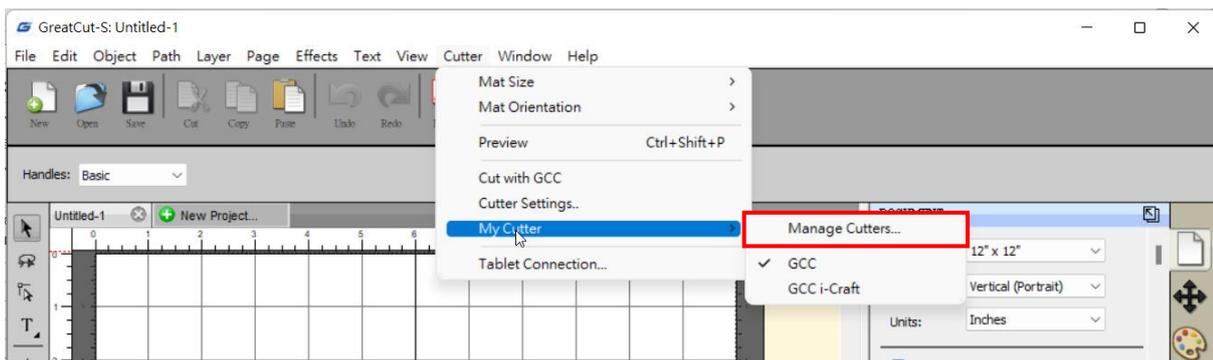
There are basic instructions of GreatCut-S below. If you need detailed instruction, please refer to GreatCut-S Help.

## A. Select the cutter you want to output and change the work area.

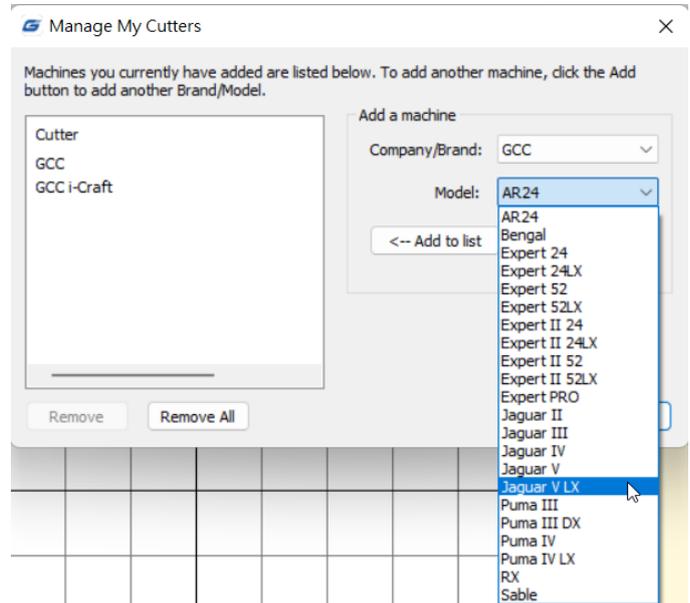
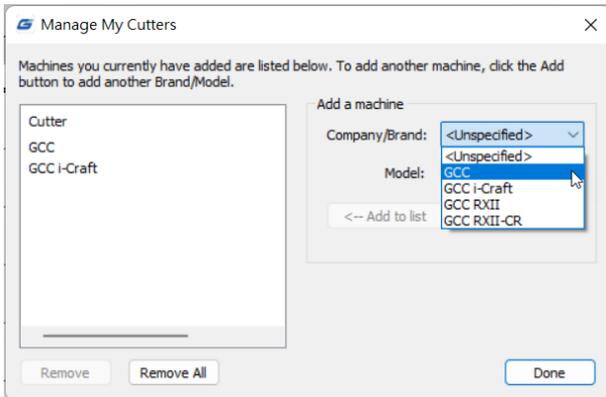
### 1. Run GreatCut-S software.



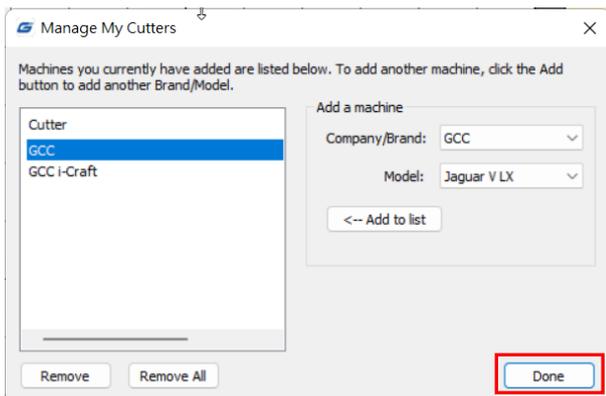
### 2. Select "Cutter" and select "Manage Cutters" under My Cutter to change the work area.



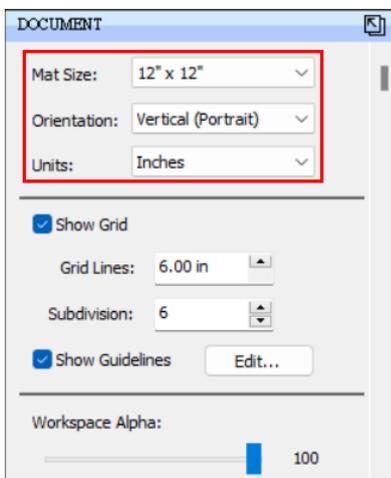
3. Select company / brand as GCC and select model you want to output and then click the “<--Add to list” button.



4. Select GCC on the left and click “Done.”

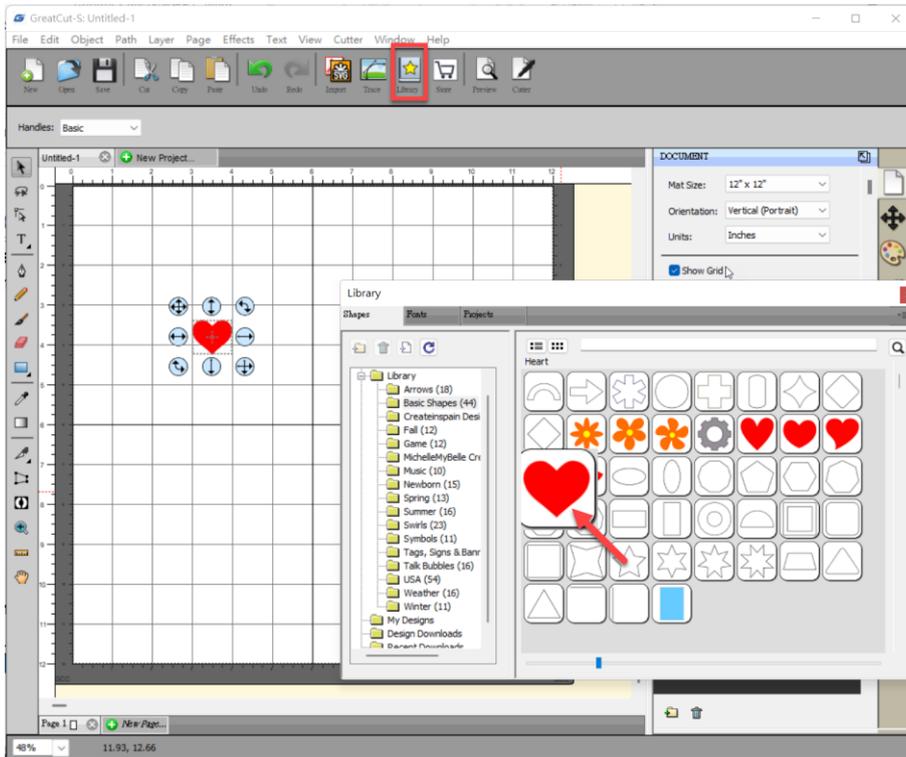


5. If you want to change the material size and orientation, you can fill a proper value in the Document window.



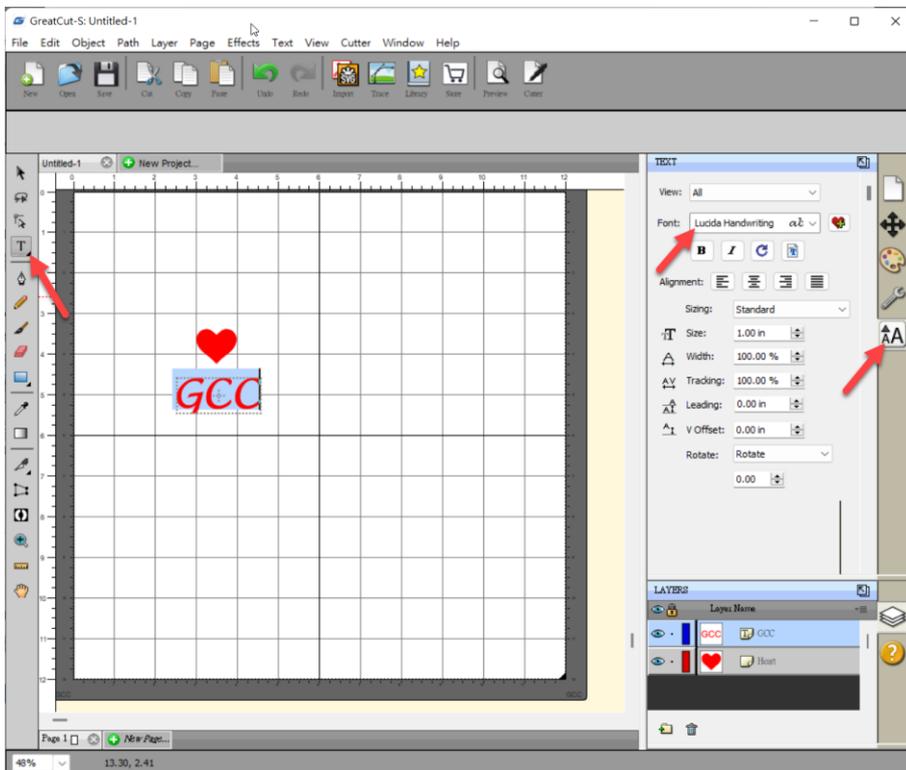
### B. Insert Graphics from Library

Select graphics from library to insert a selected design.



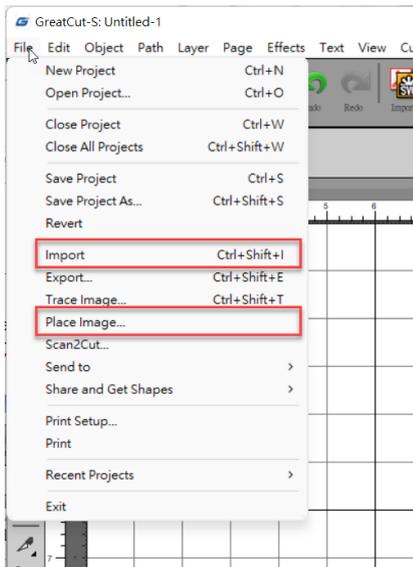
### C. Draw Text

Click on the T icon at left side to create the text and select the font you like at text window.



## D. Import Design

If you have created your design in other design software, go to “import” or “place image” under file to import it, GreatCut-S supports svg, scut, scal, pdf, ai. wpc eps, bmp, gif, jpg and png files.

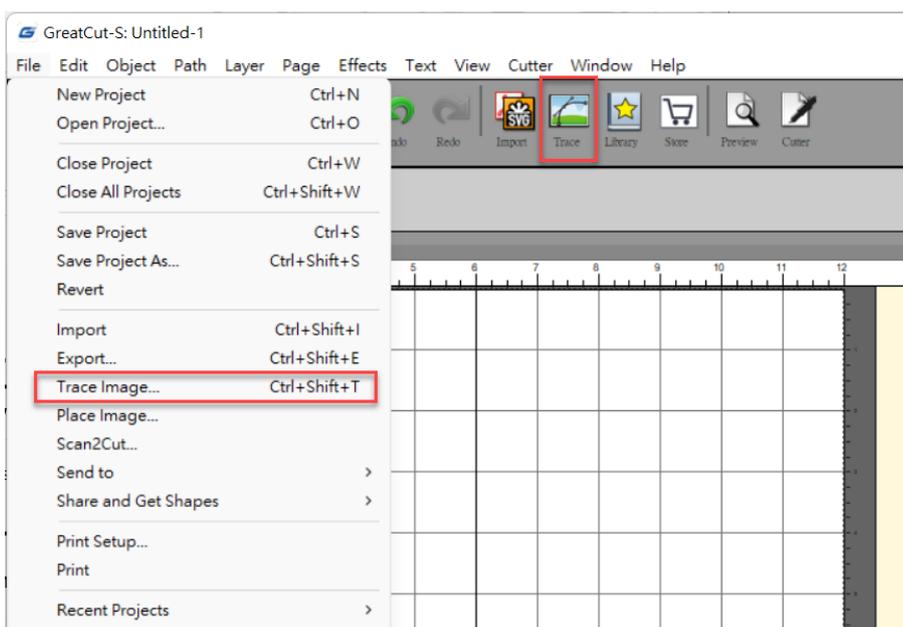


### Tips Thousands of SVG files available on SVGcuts!

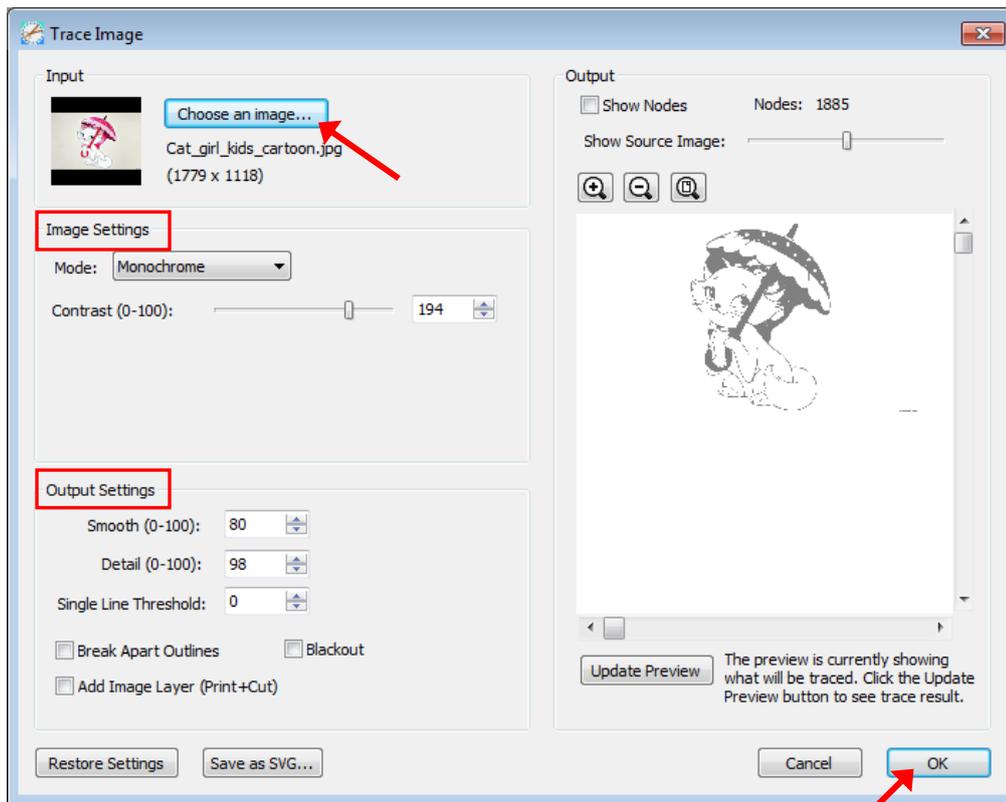
- ✓ <http://SVGCuts.com> is the top of source for designer SVG files. Thousands of high quality elements including: shapes for card-making, scrapbooking, as well as gift bags, boxes and 3D flowers.

## E. Convert Image to Cutting File

1. Go to Trace Image under File, or select Trace Image icon on the toolbar to open the setting window.



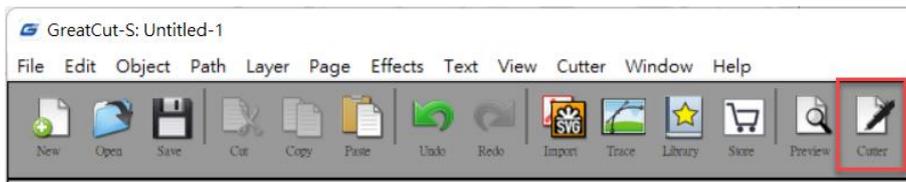
- Click on “Choose an image” to input the image, adjust Image Settings and Output Settings, and click OK. Then the outline of the image will be outputted automatically.

**Note**

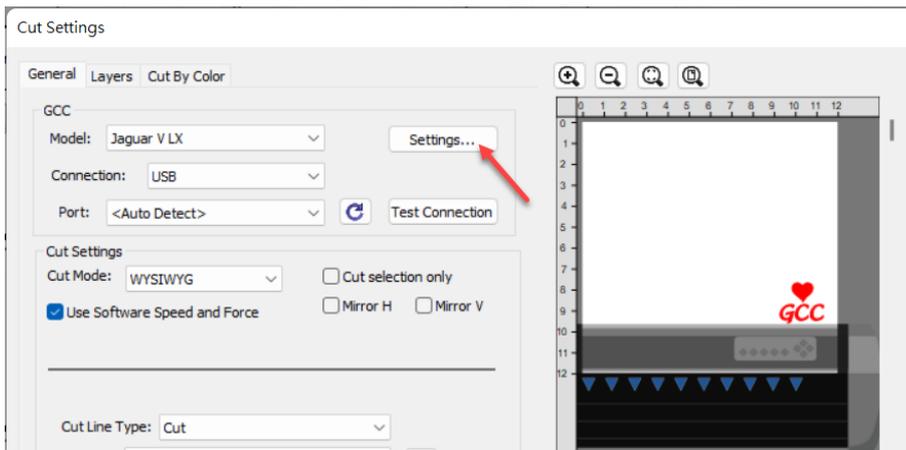
- ✓ The **contrast** and **pixels** of import images will affect the trace image result. High contrast graphics are recommended.

## F. Cut the Design

1. Click on the “Cutter” button on the toolbar and Cut Settings window will pop up.



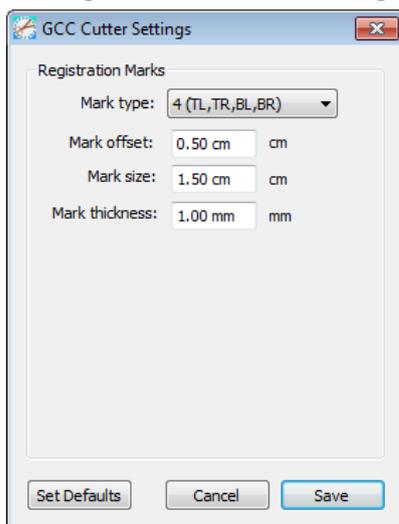
2. Click on “Settings...” to open GCC Cutter Settings window.



### Note

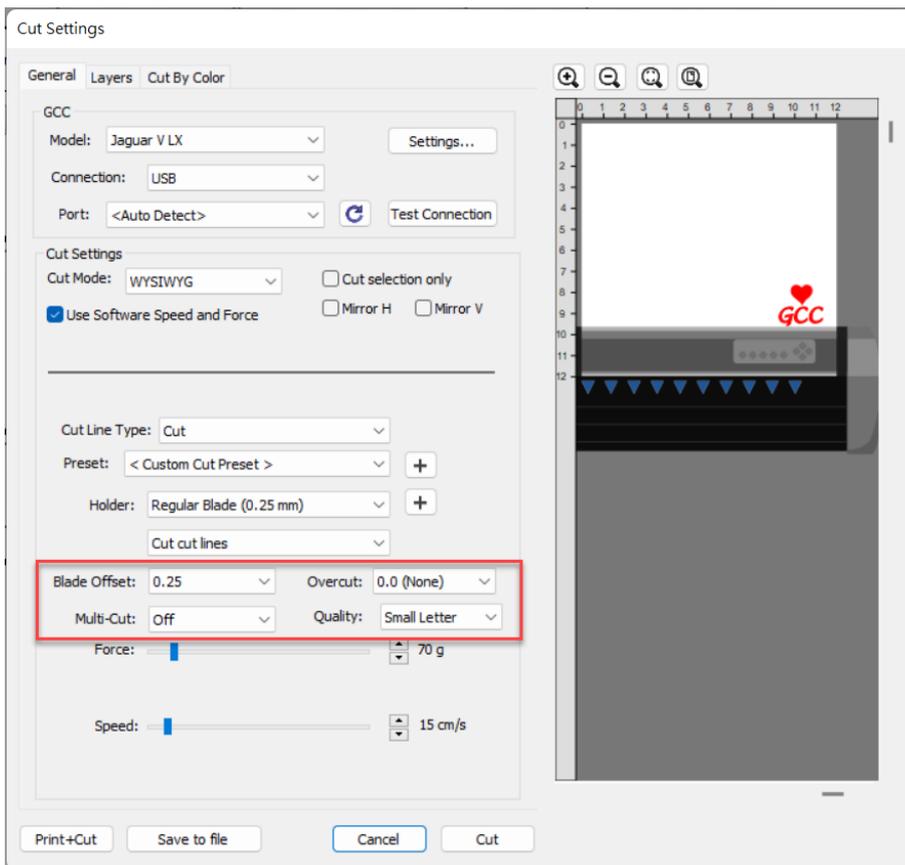
- ✓ The origin point is on the bottom right.

3. Adjust Registration Marks setting under GCC Cutter Settings window if needed.



**\*Registration Marks:** set the distance between the edge of the material and the registration marks in Mark Offset; set the size of marks in Mark Size; set the line thickness of marks in Mark Thickness.

4. Adjust Blade Offset, Overcut Value, Multi-Cut and Quality under Cut Settings window if needed.

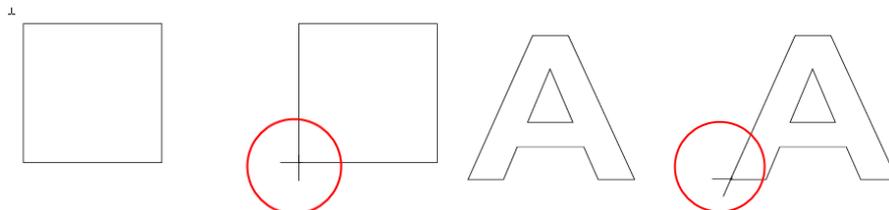


\***Blade Offset:** set the offset value according to different blade, for a standard blade, set the offset value at 0.25mm, 0.5mm for an optional advanced blade and 0mm for an optional plotting pen.

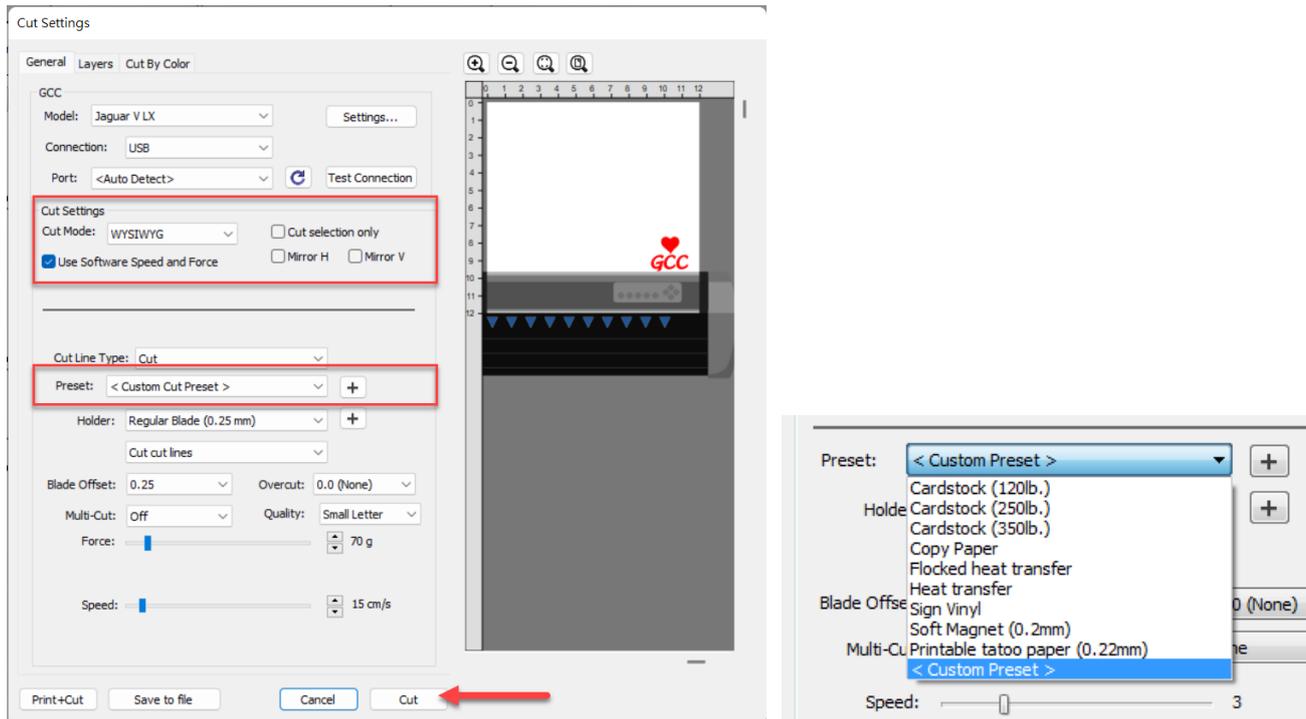
\***Quality:** associated with the cutting result; please note the better cutting quality, the slower cutting speed.

\***Multi-Cut:** to repeat the cutting job at same position which is suitable for cutting thick material.

\***Overcut:** allows for easier weeding and makes up for incomplete cut lines.



5. Under “Cut Settings” section, there are some useful functions. After setting the parameters, click on “Cut” to send the data to the GCC cutter and the GCC cutter will start the cutting job.



**\*Cut Mode:** there are “WSIWYG” and “Origin Point” options, WSIWYG means what you see is what you get, the cutter will output the graphic at same position in preview window. While with Origin Point mode, the cutter will cut the graphic from bottom right origin point of the material.

**\*Use Software Speed and Pressure:** tick this section, and you can set the values of speed and pressure manually.

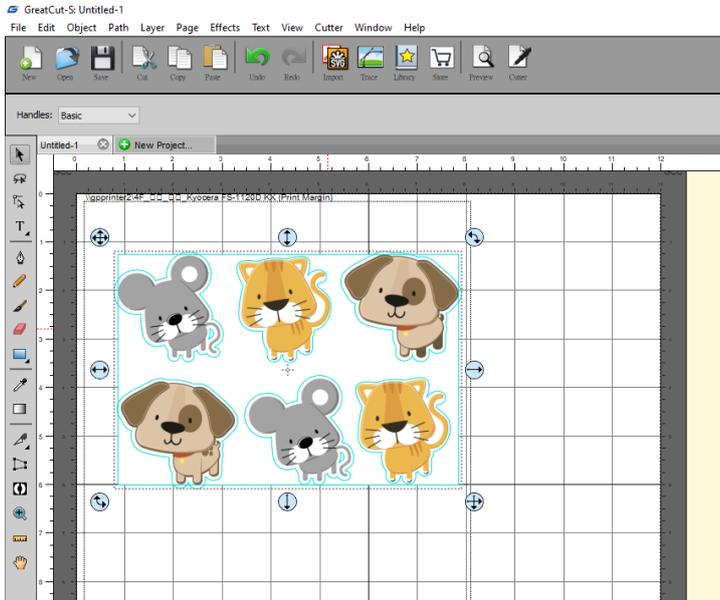
**\*Preset:** select a proper material to apply the preset speed and pressure parameter automatically.

**\*Speed & Pressure:** you may adjust values of speed and pressure manually to get quality results.

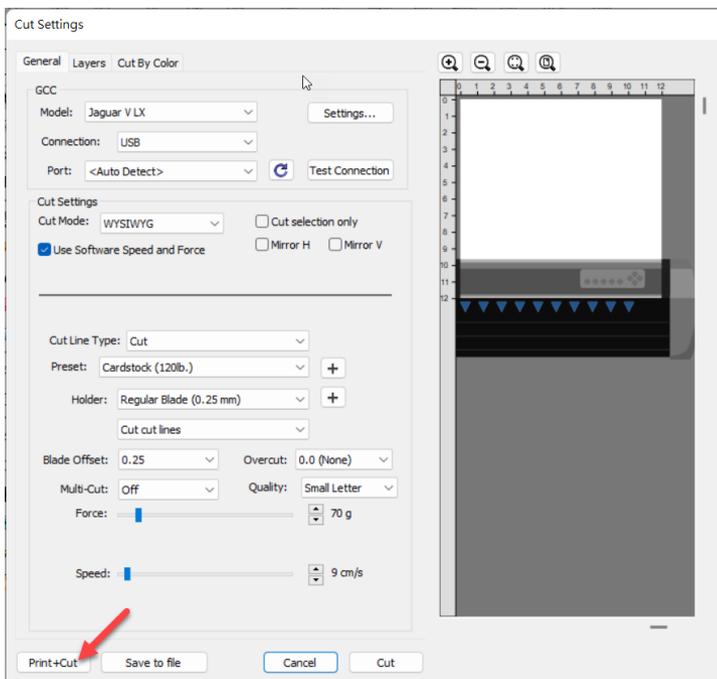
## G. Print and Cut Your Design

The Print and Cut function allows you to print the graphics from GreatCut-S to printer, and then put the printed materials on the GCC cutter to cut out the contour of printed jobs from GreatCut-S.

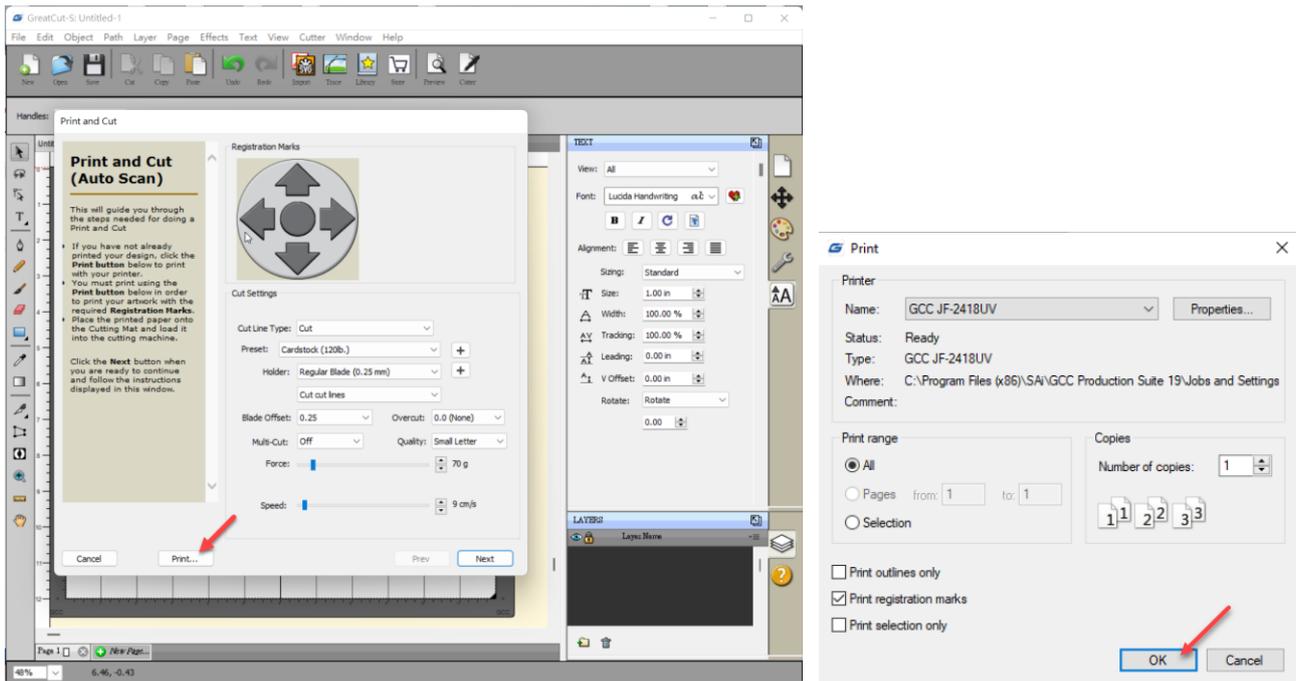
### 1. Open an image file in GreatCut-S.



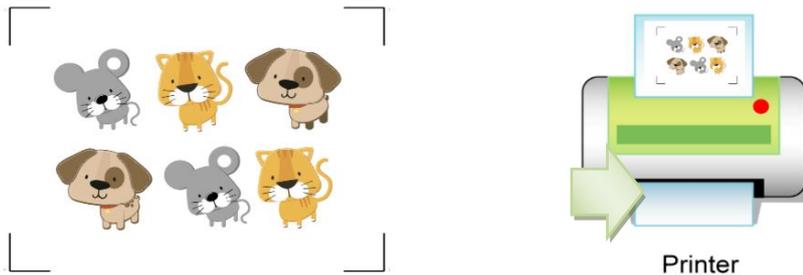
### 2. Click on the Cutter icon on the toolbar, set the parameters and click on “Print+Cut” to add the registration marks and print out the image.



3. Click on “Print...” to open printer setting window and click OK.

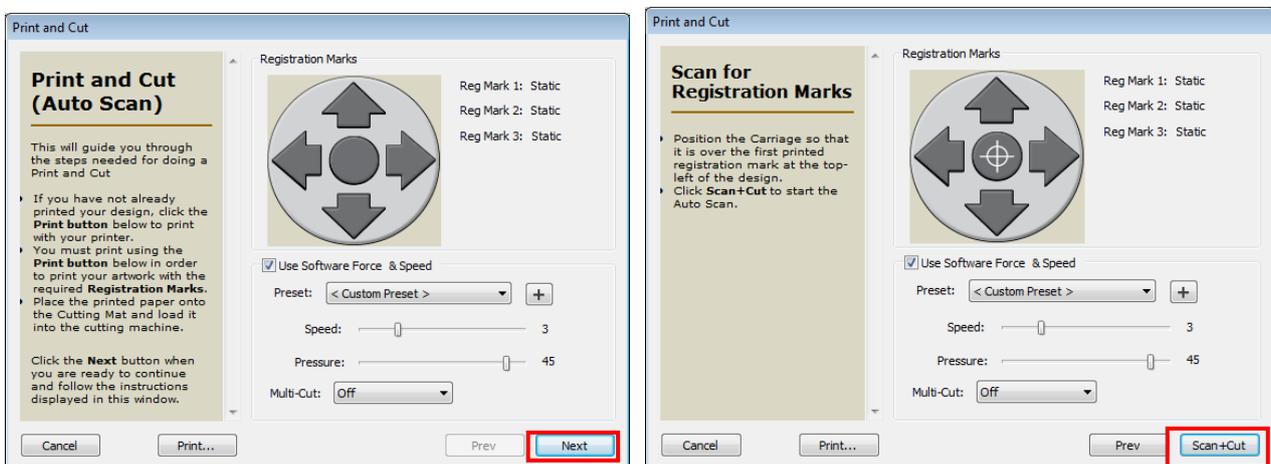


4. Print your design with registration marks out.



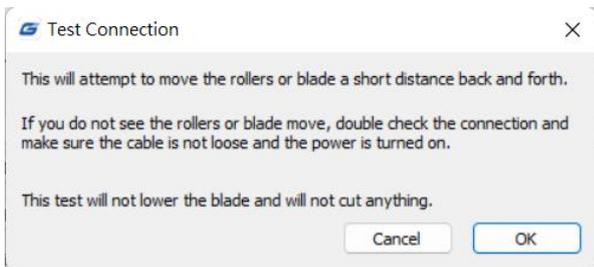
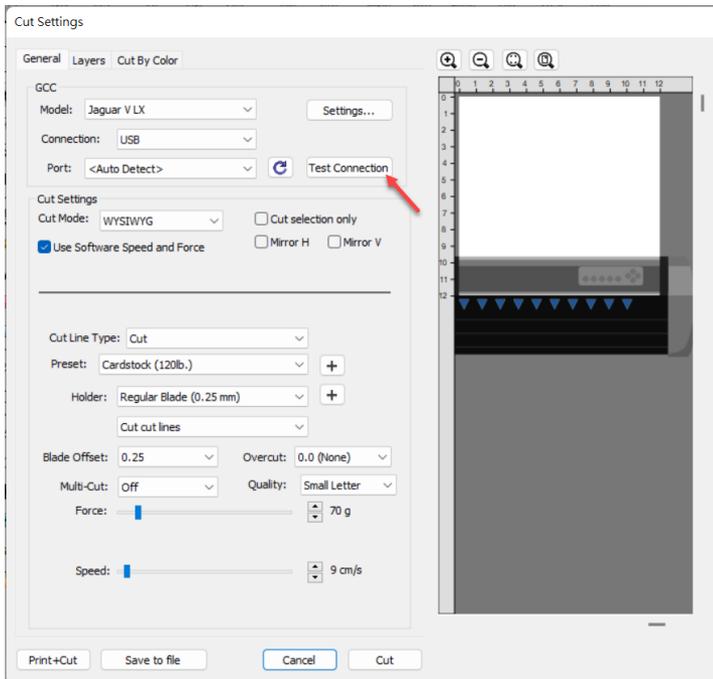
5. Load the printed media to the GCC cutter.

6. Press “Next” and then press “Scan+Cut”, and then the GCC cutter will detect the registration marks and cut the contour lines automatically.



**Tips** Test Connection function can save your materials.

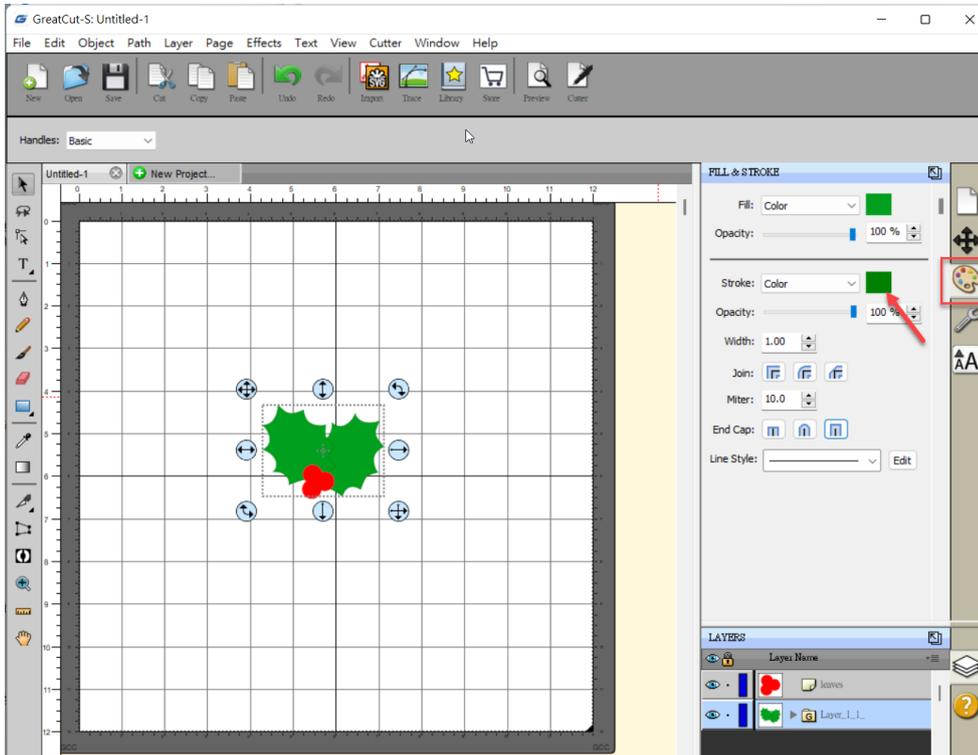
- ✓ Click on “Test Connection” to exam if set the connection properly.



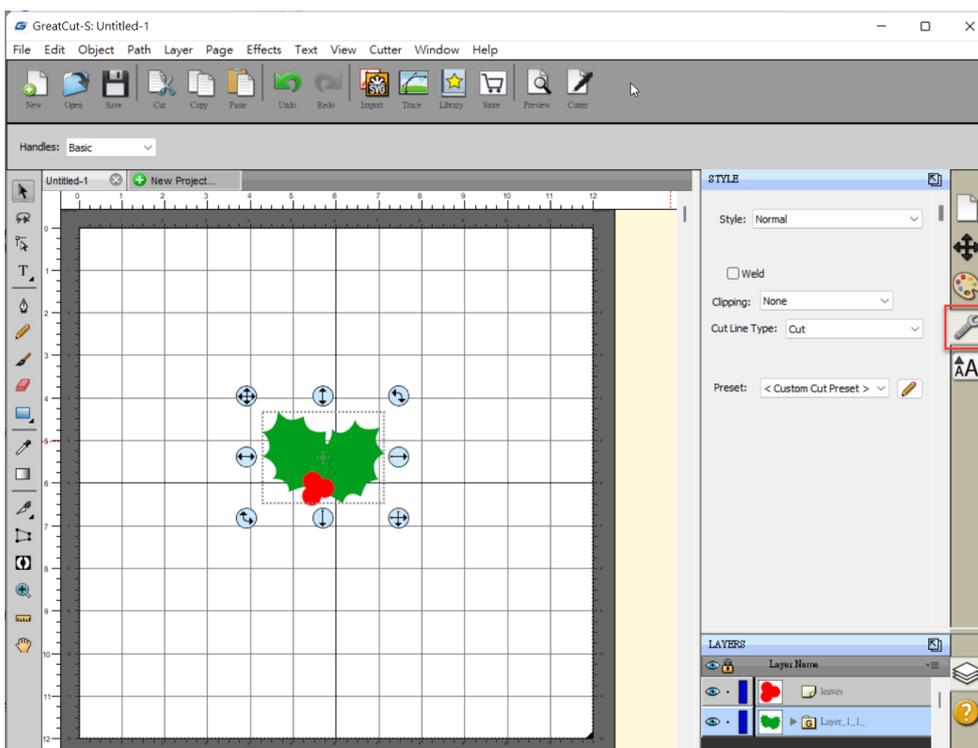
## H. Cut by Color

The Cut by Color function allows you to choose which colors in your design you want to cut, and designate different parameters to each color. You can cut your designs in a single job or separate jobs for each color.

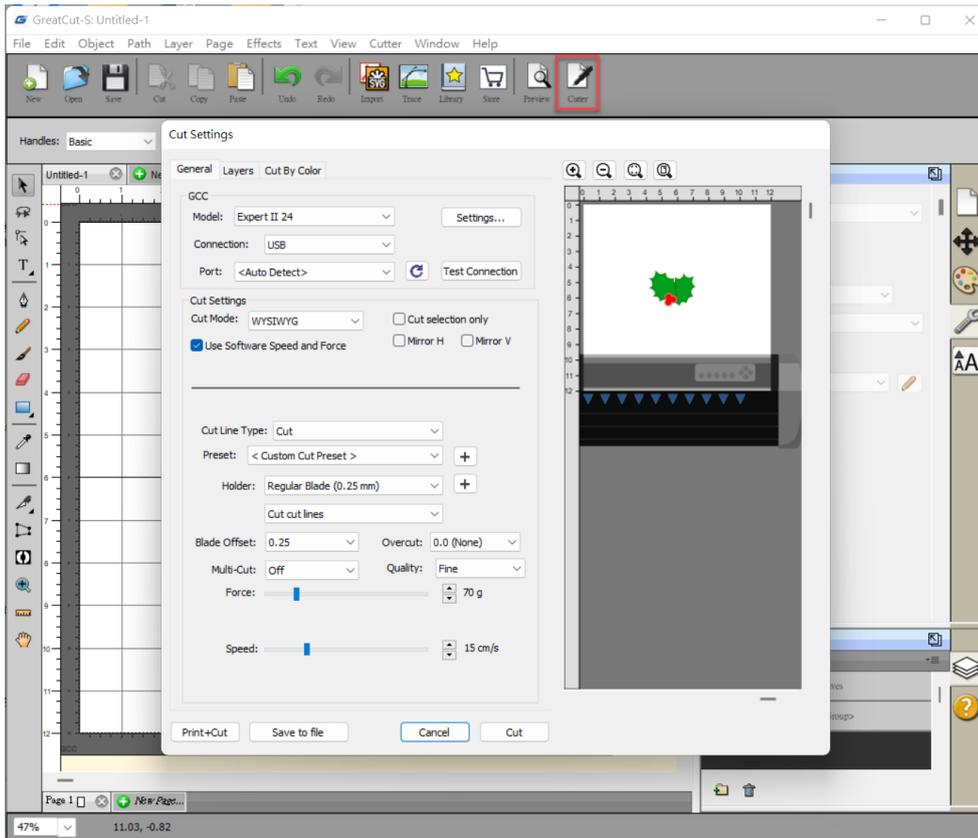
1. Select a design and specify a color for it.



Then define cut type and parameter.



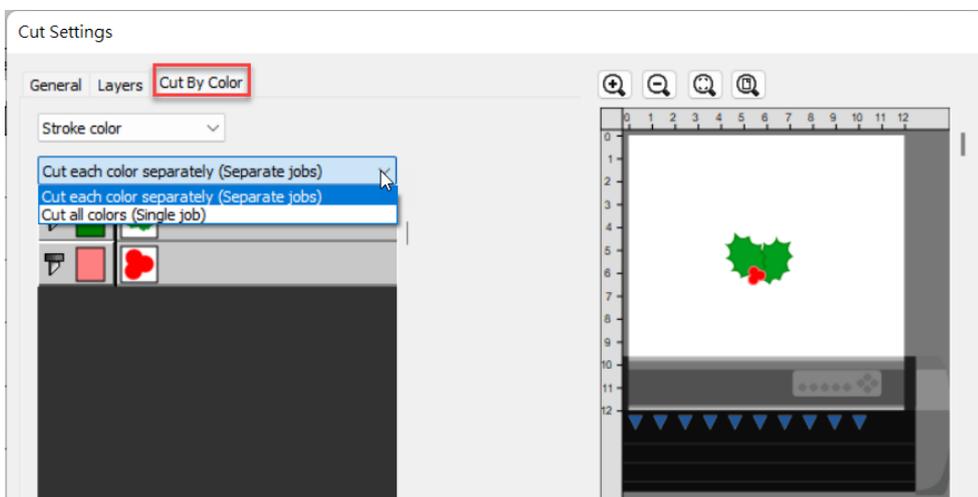
## 2. Click on “Cut” to open Cut Settings window.



## 3. Click on the Cut by Color tab and choose to either Cut all Colors in a single job or Cut each color separately as an individual job.

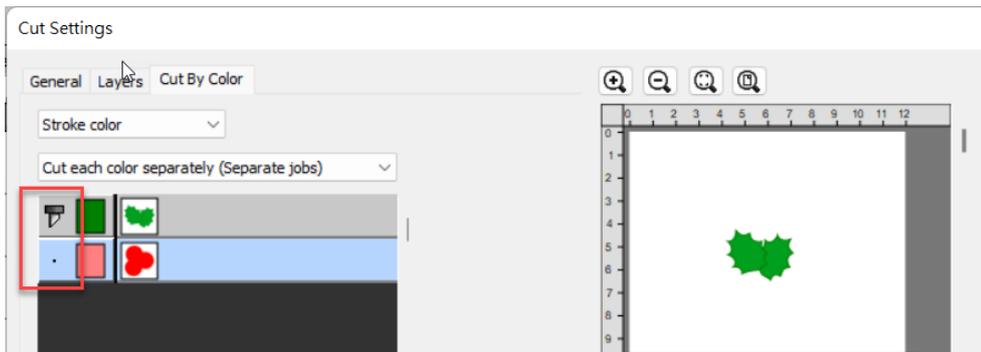
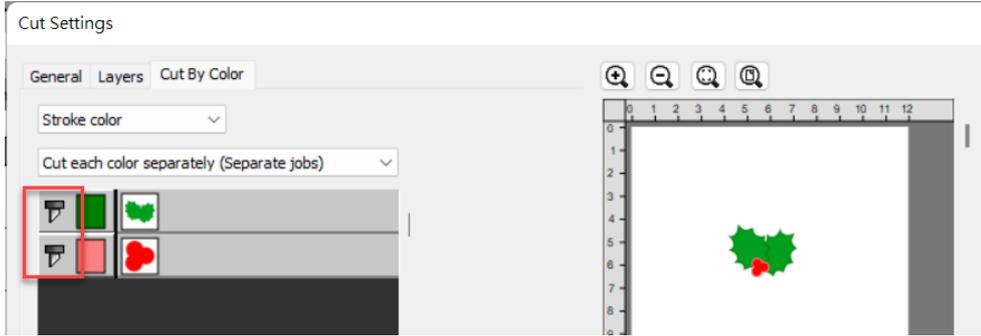
When Cut each color separately is selected, GreatCut-S will prompt you between each color before starting to cut so you can load the appropriate color or corresponding tool into your cutting machine.

Note: If the same tool is being used for all colors in a cutting job, it is suggested to use “Cut all colors (Single job)” .

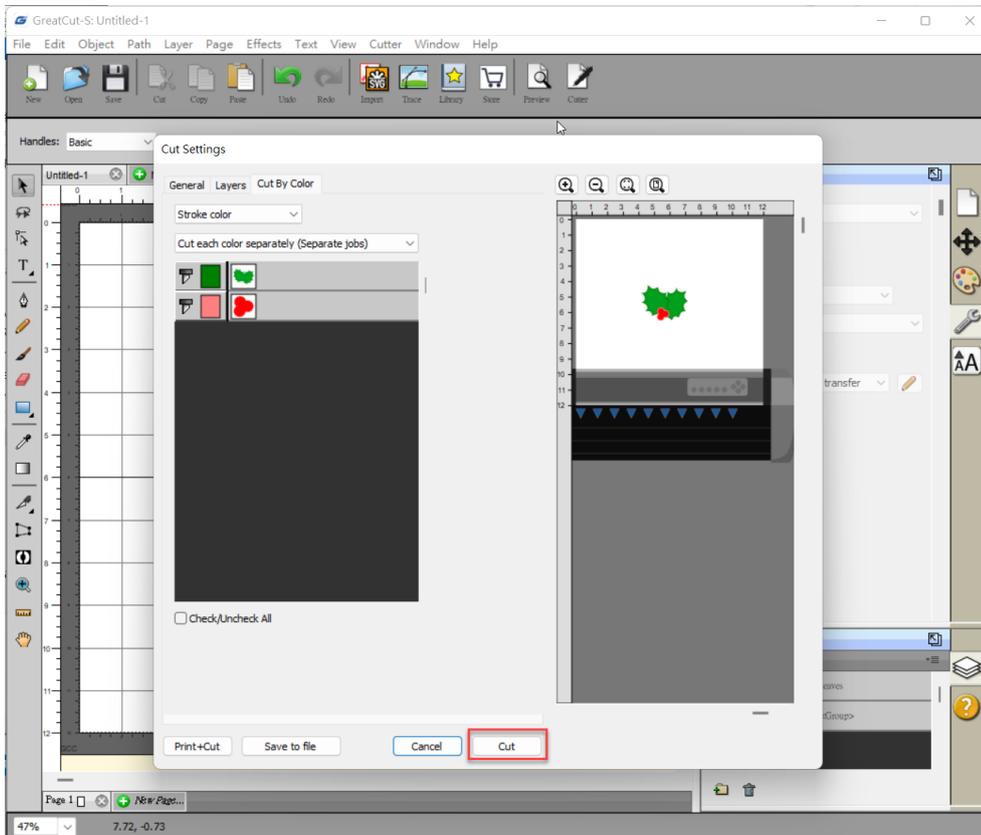


- Click on the blade icon to choose the colors you want to cut. The preview will display which colors are currently enabled for cutting.

Note: You can adjust the order of the layer arrangement by clicking and dragging the layer.

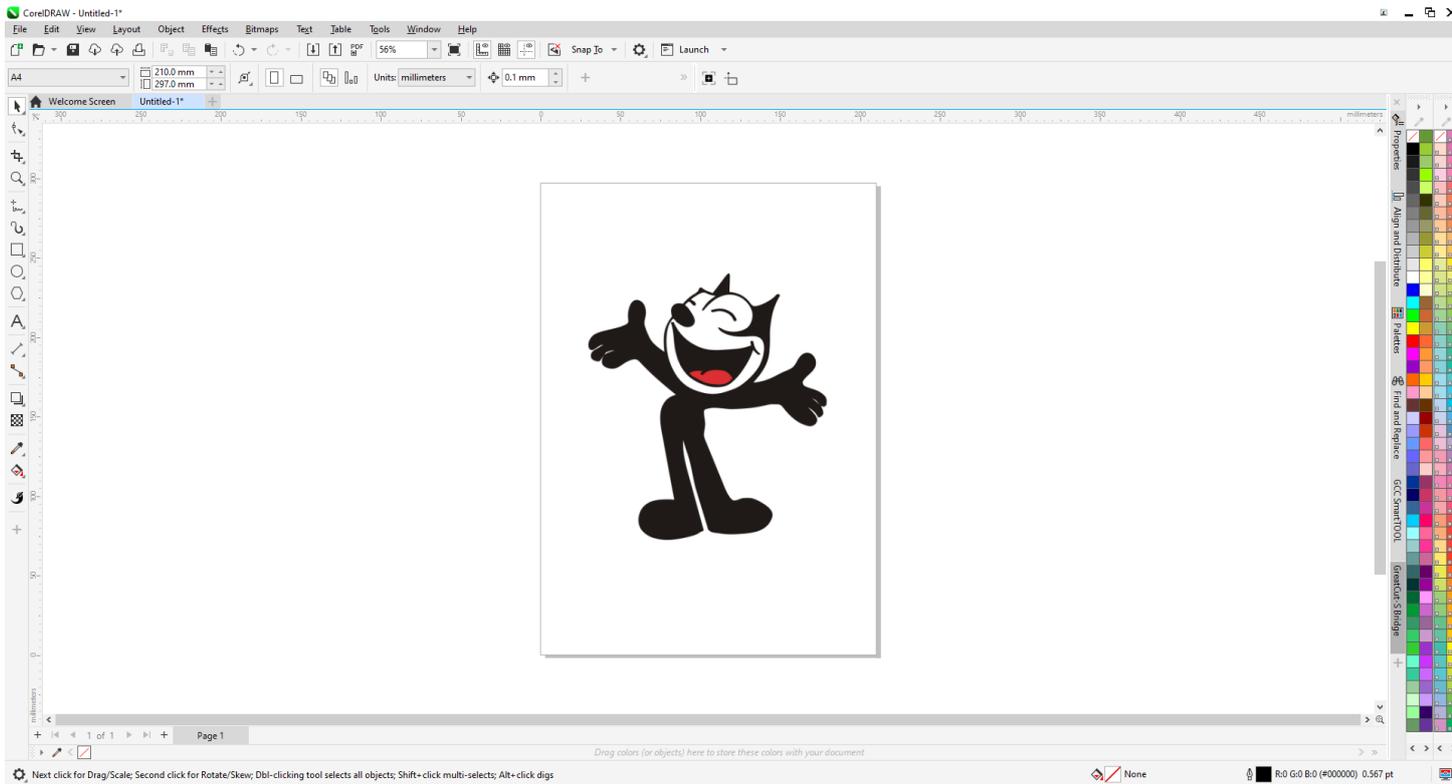


- Click on "Cut" to start cutting.

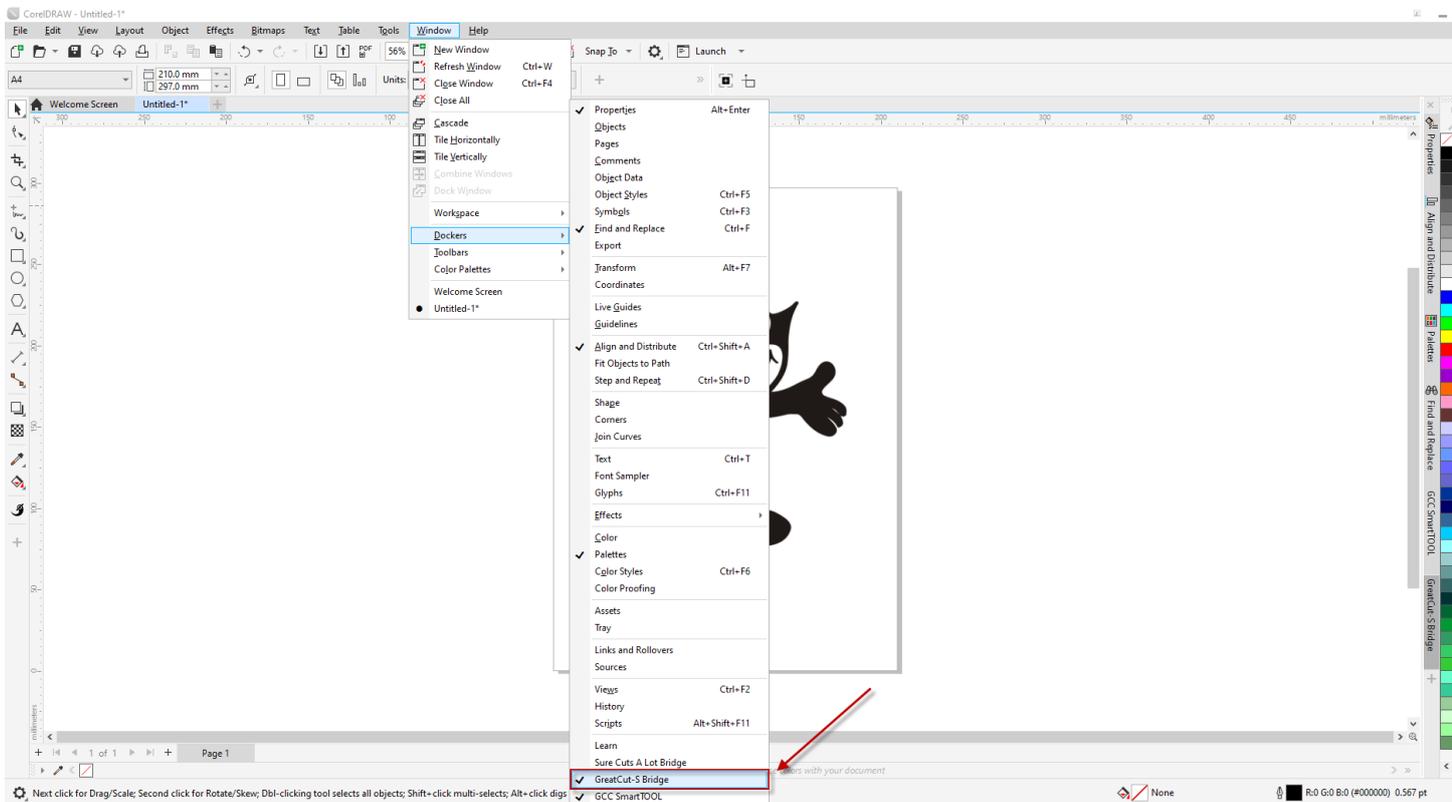


# I. How to create Registration mark in Greatcut-S for contour cutting

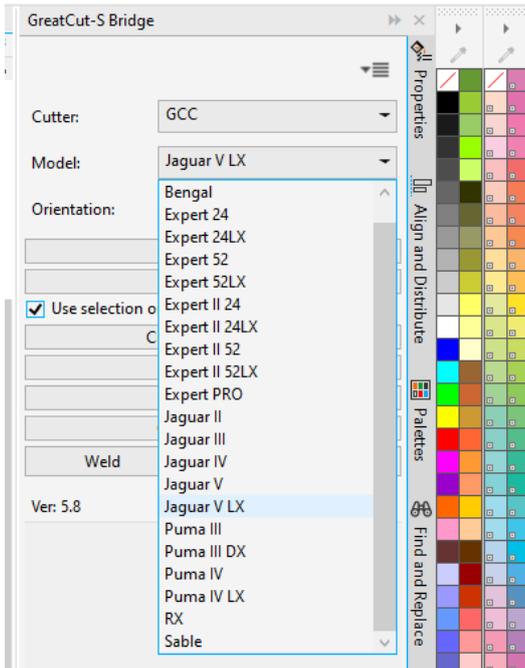
## Step1 Create a file



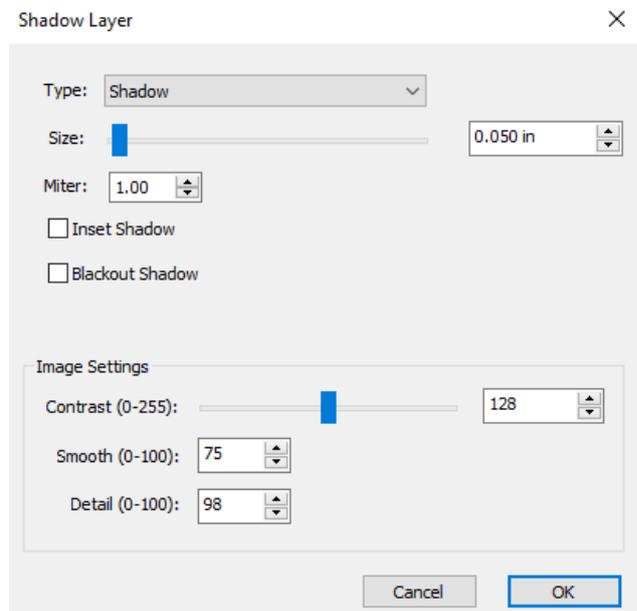
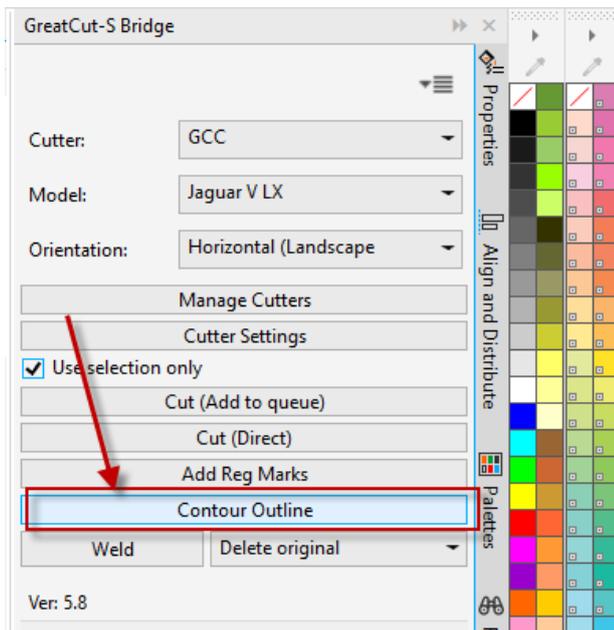
## Step2 Go to Windows → Dockers → GteatCut-S Bridge



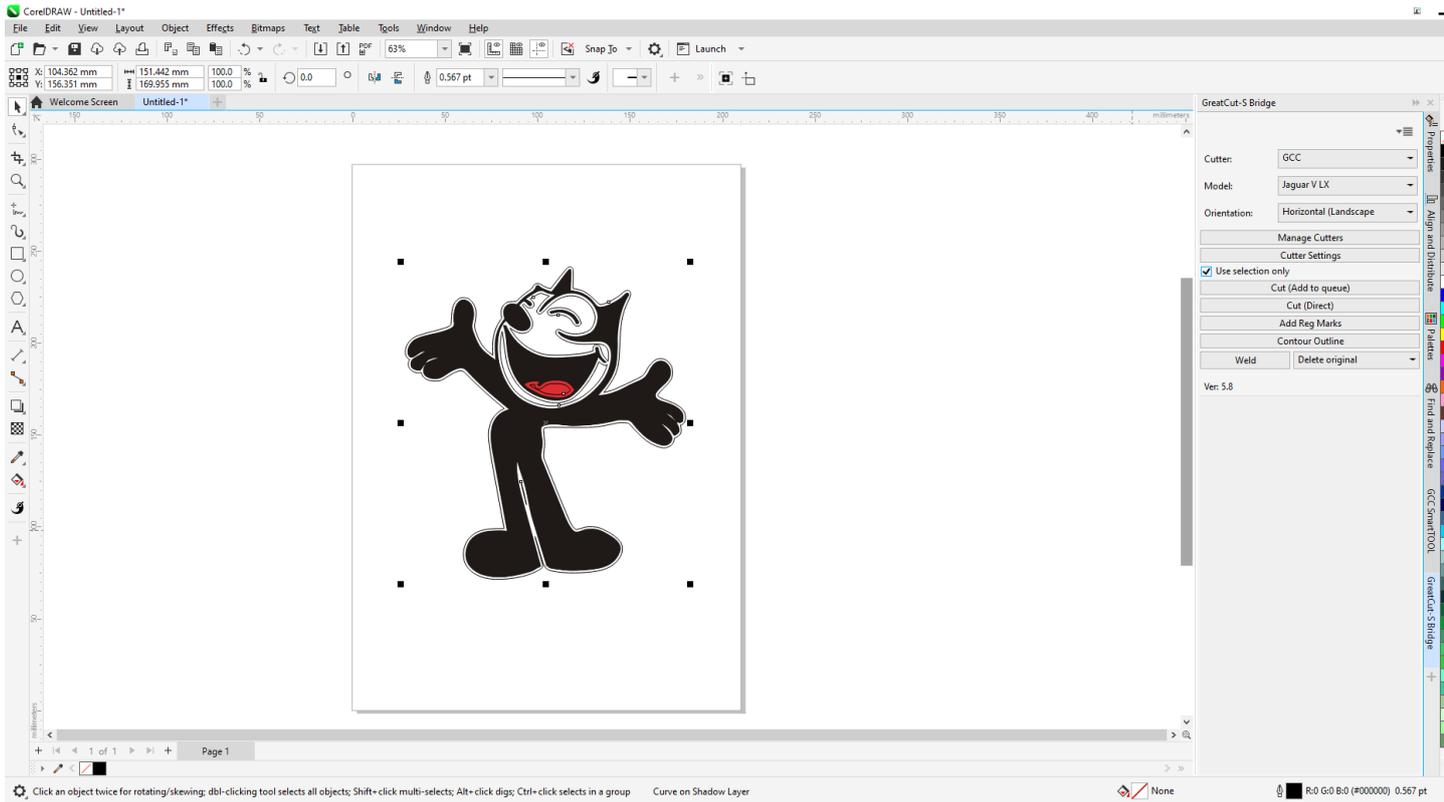
Step3 Select the model with AAS function from the model menu in GreatCut-S Bridge.



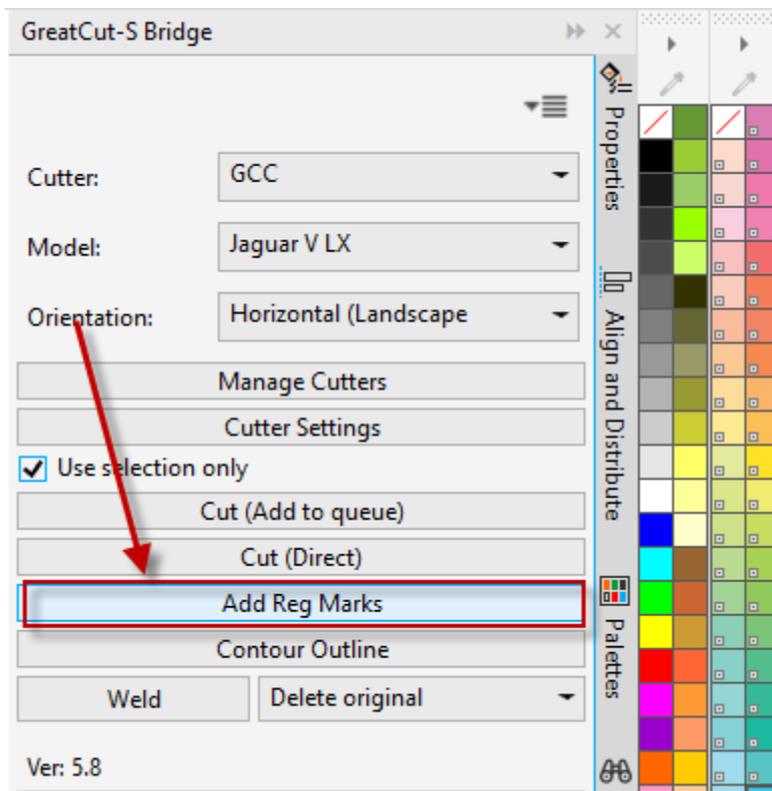
Step4 Select Contour Outline, and define the offset value of contour line from the size option in Shadow Layer menu.



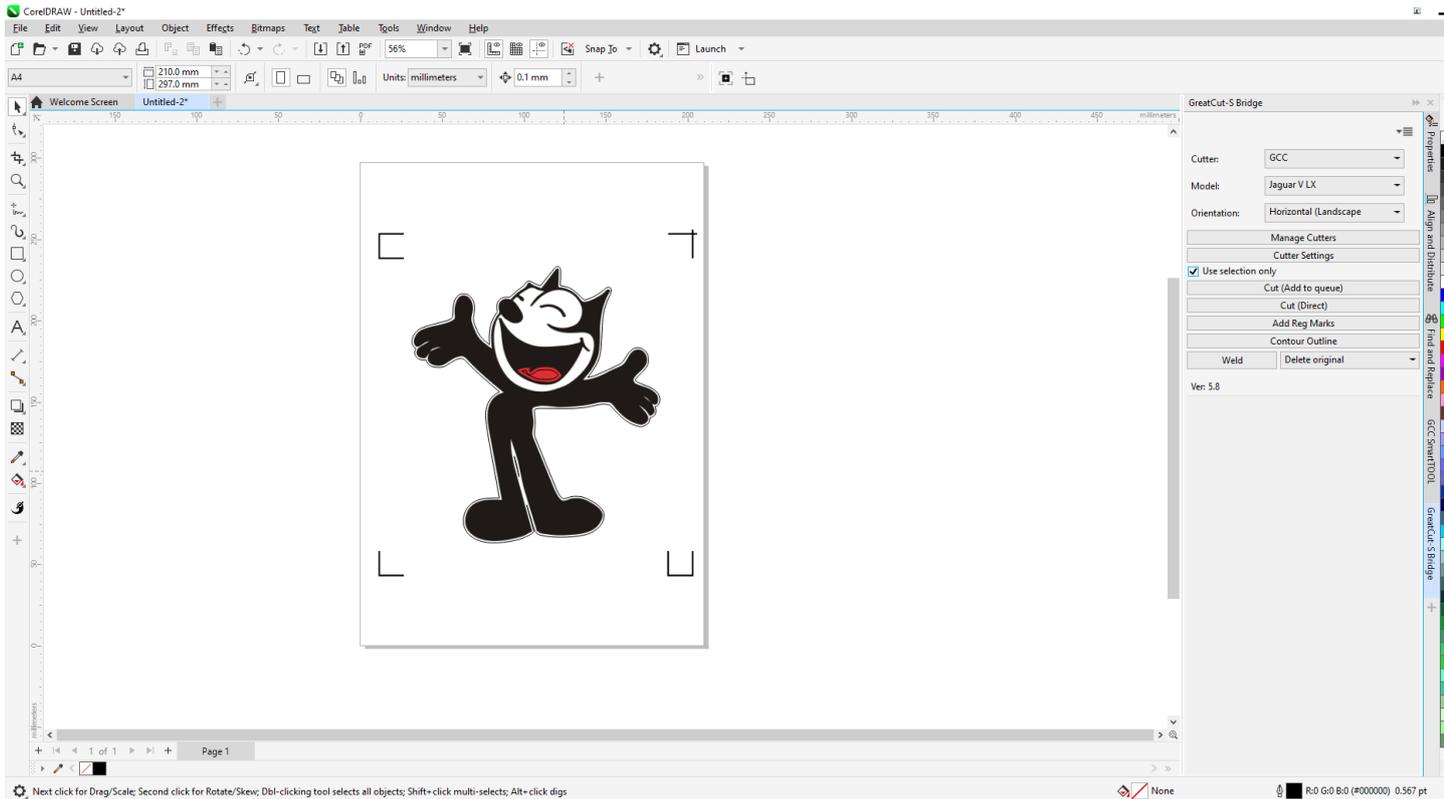
Step5 The contour line is created.



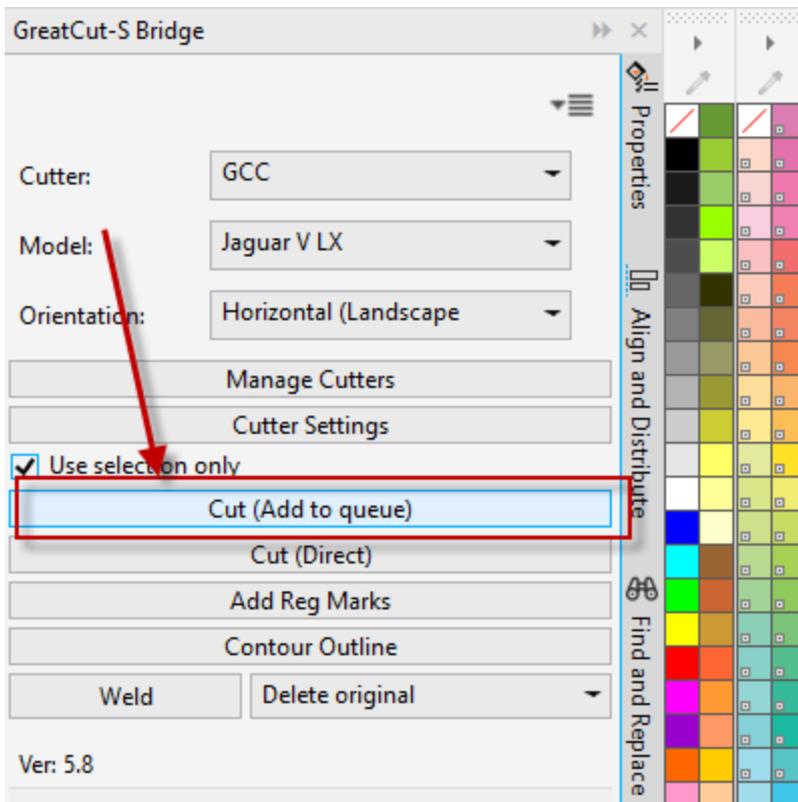
Step6 Select “Add Reg Marks” to add registration marks.



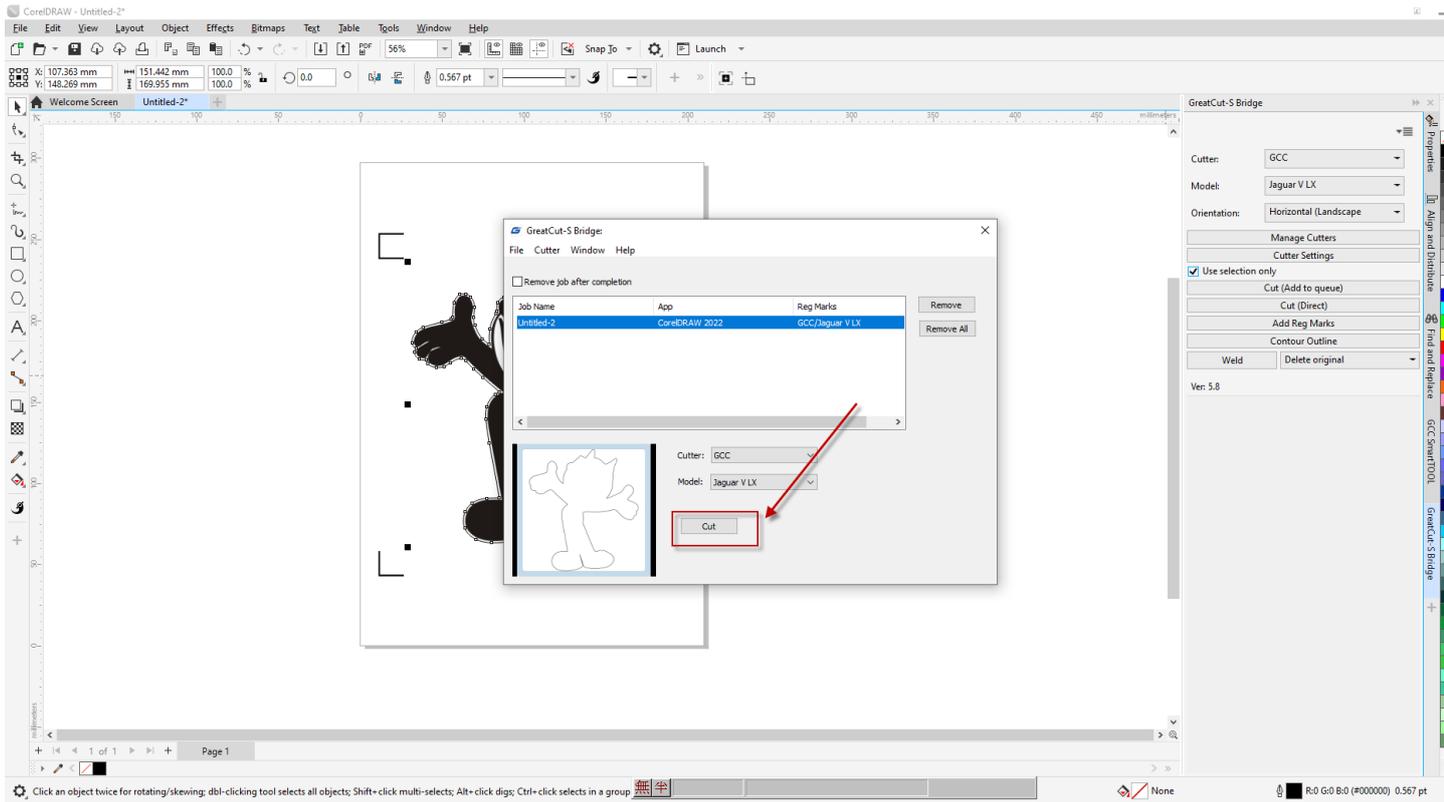
Step7 The registration marks are added.



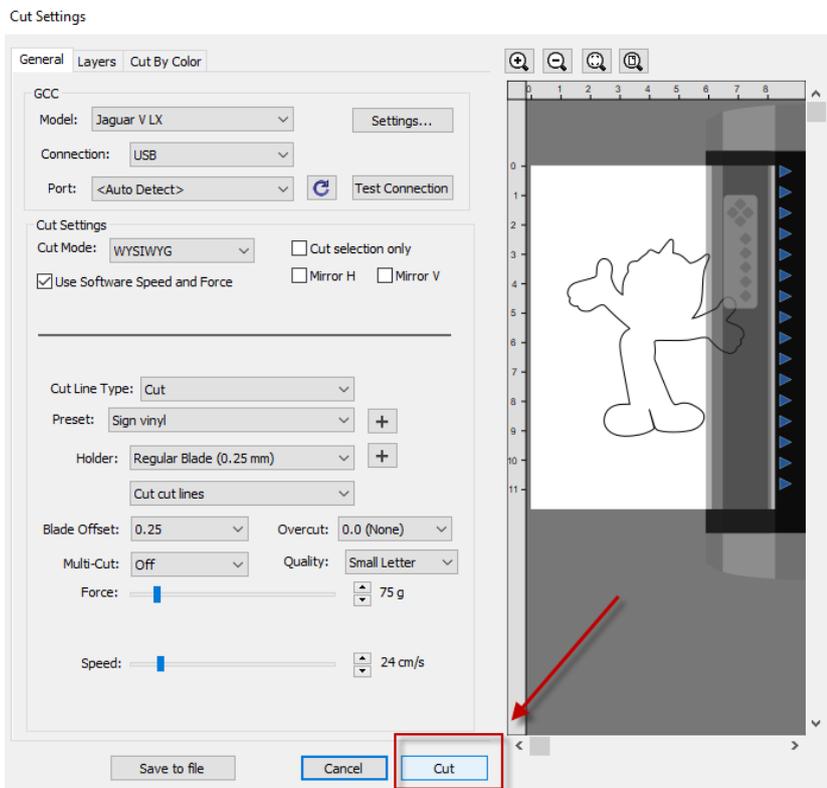
Step8 Select "Cut (Add to queue)" to send the file.



Step9 Click on “Cut” in GreatCut-S Bridge window.



Step10 Define the parameters in Cut Settings window and select “Cut”.



Step11 The process is complete.