

Cutting Master 4

User Guide

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CHAPTER

Introduction Topics

1.1. Introduction

Cutting Master 4 is a program that allows you to output directly from your design application to a cutter.

It consists of two parts:

- » The Cut/Plot plug-in that allows you to set job properties for the cut job from within your design application and sends the job to Cutting Master 4.
- » The Cutting Master 4 program that receives the job from the Cut/Plot plug-in and outputs it to the cutter.

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1.3. Supported Applications

On Windows, Cutting Master 4 supports the following design applications:

- » CorelDRAW X4, X5, X6, X7, X8
- » Adobe Illustrator CS5, CS6, Creative Cloud

On Macintosh OS X, Cutting Master 4 supports the following design applications:

- » Adobe Illustrator CS5, CS6, Creative Cloud

1.4. Using the Software

To send a job to a cutter using Cutting Master:

- » Create the job in the design application.
- » If desired, add registration marks to your design.
- » Open the Cut/Plot dialog.
- » Adjust the job properties in the Cut/Plot dialog.
- » Send the job to Cutting Master 4.
- » Use Cutting Master 4 to output the job to the cutter.

CHAPTER

Installation and Setup

2.1. Recommended System Requirements

Before you begin installing the software, read the hardware requirements below. For optimal performance we suggest that your system meet the recommended requirements. As with all computer software, systems with faster processors, more RAM, and greater amounts of storage space allow you to work with larger files and keep your processing time to a minimum.

	Windows	Macintosh
Processor	i3 or higher	Intel
RAM	4GB or greater	
Installation space	1 GB	
Operating System	Windows 7, 8 and 10	OSX 10.7 or greater
Other	Available Port for Output Device	
	Internet Connection	

2.2. Installing the Software on Windows

2.2.1. Before You Begin

Before you install the software, you should do the following:

- » Install all of your design applications.
- » Install any additional drivers that are necessary for your cutters, such as USB drivers.
- » Set your cutter to operate in GPGM mode. See your cutter documentation for details.

2.2.2. Installation Steps

Full access rights are required to install this software. Be sure to log on to Windows as an administrator account member.

To install Cutting Master 4:

- » Uninstall any previous version of the software.
- » Download and run the Cutting Master 4 installer
- » Select the Setup language and then click OK.
- » On the Welcome screen, click Next.
- » Read and accept the Software License Agreement and click Next.
- » Choose the Destination Folder the software will be installed into. Click Next.
- » Select Features and Click Next.
- » Select the Program Folder where the shortcut for the software will appear. By default, a new folder will be created for the product.
- » Click Next to begin installing the software.
- » If you have Adobe Illustrator installed, you will be prompted for the location of the Plug-ins folder for each version of Illustrator you have installed.
 - » If necessary, click Browse and select the folder location.
- » Select Finish.

2.2.3. Steps to uninstall the software

- » Exit Cutting Master 4 by selecting Exit from File menu.
- » In the Windows Control Panel, double-click the Add or Remove Programs icon.
- » Select Cutting Master 4 from the list and click the Change/Remove button.
- » In the Welcome screen, select Remove and click Next.
- » Click Yes to uninstall the software.

2.3. Installing the Software on Mac

2.3.1. Before You Begin

Before you install the software, you should do the following:

- » Install all of your design applications.
- » Install any additional drivers that are necessary for your cutters, such as USB drivers.
- » Set your cutter to operate in GPL mode. See your cutter documentation for details.

2.3.2. Installation Steps

Full access rights are required to install this software. Be sure to log on to Mac OS X as an administrator account member.

Follow these steps to install the software:

- » Download the installer
- » Double click the Installer icon.
- » Select a language and then click OK.
- » Select the product and language to be installed and then click OK.
- » Read the Software License Agreement and click Accept.
- » Click Next.
- » Select the Install Location and click Install.
- » The software installs. Click Stop to halt installation.
- » Click Yes to clear the preferences.
- » Click OK.
- » Click Quit.

2.3.3. Steps to uninstall the software

- » Exit Cutting Master 4 by selecting Quit from the application menu.
- » In the Cutting Master folder, double-click Uninstall.
- » Click OK.

2.4. Creating an SAi Cloud Account

The first time you launch Cutting Master 4, the SAi Cloud Connect dialog comes up allowing you to sign in with an existing account or to sign up to a new account.

- » If you already have an SAi Cloud account, enter in your email address and password
- » If you are new to SAi Cloud, Click Need an account? Sign Up
 - » Enter in a valid email address and click Sign Up
 - » Check your email inbox for an email from noreply@saicloud.com
 - » Follow the instructions in the email to create a password
 - » Use the email and password you created to log into SAi Cloud Connect

CHAPTER

Creating the Job in the Design
Application

3.1. Guidelines for Creating Your Design

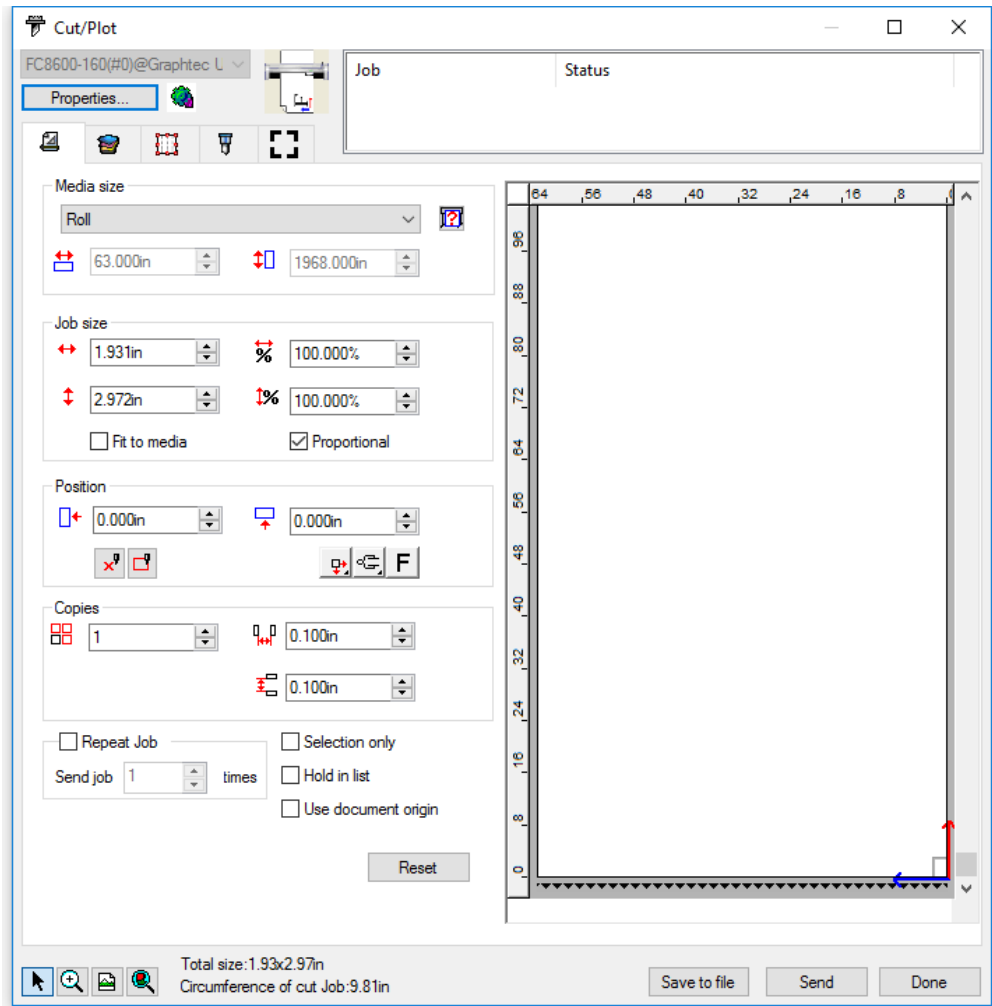
When creating a job, remember the following guidelines:

- » Convert all bitmap graphics into vector objects. Cutting Master 4 can only output vector objects.
- » Objects cannot have patterned fills, bitmap fills, lens effects, gradients, or other custom fill types. Any objects with these fill types will be ignored by Cutting Master 4, and will not appear in the Cut/Plot dialog.
- » Use colors or layers to separate objects that you want to output at different times. You can then use the Layering tab of the Cut/Plot dialog to choose which colors or layers will be output.
- » There is no need to make duplicate copies of your design in the design application. Cutting Master 4 can easily output duplicates of any design, and can even place multiple copies on the same page.
- » Don't worry about objects of the same color that overlap. The Auto-Weld feature can automatically merge overlapping objects together.
- » If you need to make multiple cutting passes, you can select the number of passes in the Advanced tab of the Cut/Plot dialog. There is no need to stack up multiple copies of an object to force multiple cutting passes.

3.2. Accessing the CutPlot Dialog

To access the Cutting Master 4 Cut/Plot dialog:

- » If you are using Adobe Illustrator, from the File menu, select Cutting Master 4 then Cut/Plot.
- » If you are using CorelDRAW, select Cut/Plot from the Corel Application Launcher. The Corel Application Launcher is a list in the standard toolbar that lets you launch other applications from within CorelDRAW.



3.3. Entering Numerical Values

Cutting Master 4 supports a number of unique features that make it easier to enter numerical values.

3.3.1. Using Built-In Mathematical Operations

The software is able to perform a number of calculations whenever a numerical value is being entered.

3.3.2. Automatic Unit Conversion

If you enter a value using a different unit of measurement than the default unit, the software will automatically convert the value to the default unit.

For instance, if your default unit is inches, you can enter a value of 1 ft, and the software will convert the measurement to 12 in.

Supported units are:

in, "	inch
ft, '	foot
mm	millimeter
cm	centimeter
m	meter
pt	point

3.3.3. Calculation of Ratios

If you enter a ratio in the format A:B, the software will scale the previous value in the field by the ratio entered.

For instance, if a value is set to 12, and you enter 2:3, the new value will be 8.

3.3.4. Calculation of Percentages

If you enter a percentage in the format X%, the software will scale the previous value in the field by the percentage entered.

For instance, if a value is set to 10, and you enter 90%, the new value will be 9.

3.3.5. Simple Arithmetic Operators

If you enter a simple arithmetic expression, the software will calculate the result of the expression and enter that value in the field.

The available arithmetic operators, in order of precedence, are:

/	Division
*	Multiplication

-	Subtraction
+	Addition

For example, if you enter 1/8, the value 0.125 will be calculated.

Operator precedence determines the order in which the arithmetic operations will be calculated when more than one operation is specified. In the previous list, operators are listed from top to bottom in order of operator precedence. For instance, if you enter $6/2*3$, the software will calculate $6/2$ first then multiply the result by 3, yielding a result of 9.

3.3.6. Automatic Application of Entered Values and Arithmetic

Once you enter a numerical value, ratio, or arithmetic expression in a numerical field, the software will automatically apply that value after a brief delay.

CHAPTER

4

Using CutPlot

4.1. Sending Jobs to Cutting Master






To send the current job to Cutting Master 4 for output, click the Send button in the Cut/Plot dialog. To exit the Cut/Plot dialog, click Done.

Once sent to Cutting Master 4, the job will immediately be output, unless the Hold in List option on the General tab of the Cut/Plot dialog is checked. If Hold in List is checked, the job must be output manually. See "Outputting Jobs from Cutting Master 4" page 19 for details.

Once output, the job will either be deleted, or held in the queue, depending on the After Output setting in the Advanced tab of the Cut/Plot dialog.

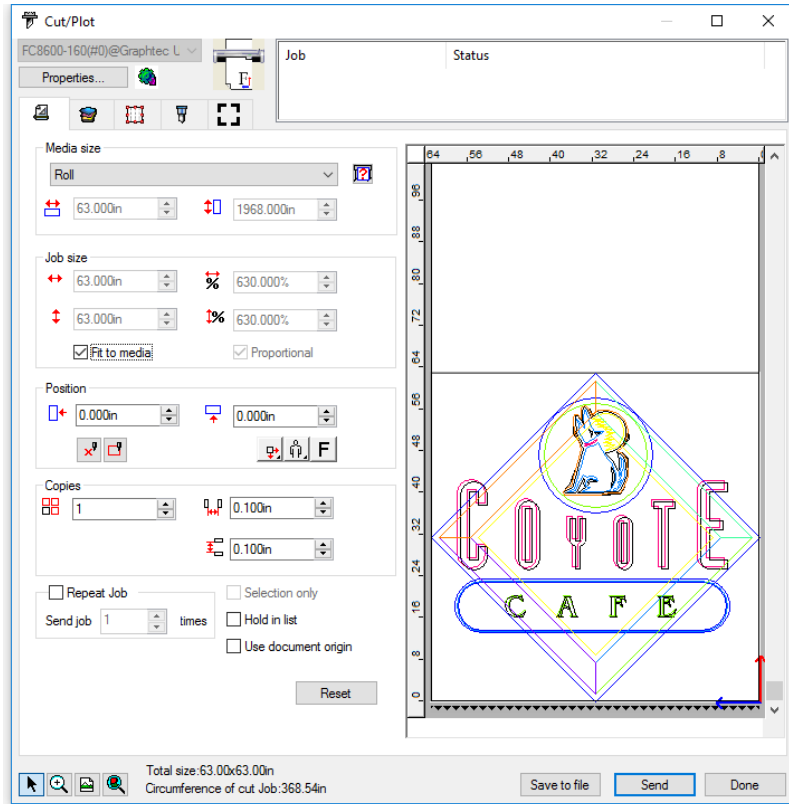
4.2. Setting Job Properties

The following controls are available on all tabs of the Cut/Plot dialog:

Properties	Click to adjust the setup properties
	Click to start Cutting Master 4.
	Click to select the Select tool. (This tool is selected by default most of the time)
	Click to select the Zoom tool. Click and drag in the job preview pane to select an area of the design to zoom in on. For Windows, hold the CTRL key and click to zoom out. For Macintosh, hold the Option key and click to zoom out.
	Click to select Zoom to Width. The preview pane will automatically zoom in or out so that the entire width of the media is displayed.
	Click to select Zoom to All Objects. The preview window will zoom in or out so that all of the objects in the design are displayed.
Reset	Click to return job properties to their default settings.
Send	Send the job to Cutting Master 4 with the current settings.
Done	Close the Cut/Plot dialog and return to the design application.
Save to File	Saves the cut job as a file.

4.3. General Tab Properties

The General tab allows you to specify the size of media, size of the job and the location of your output on the media.



The following settings are available:

Media Size

The size of the media loaded into your output device. Select from one of the preset sizes, or specify unique dimensions below.



Poll Size

polls the size of the media loaded in the cutter. This feature only works if the device and port support bi-directional communications.










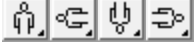




The width and height of the media. When a set of unique dimensions is specified, it is automatically added to the list of preset sizes.

Job Size

Choosing one of these options allows you change the output size and orientation of the page.

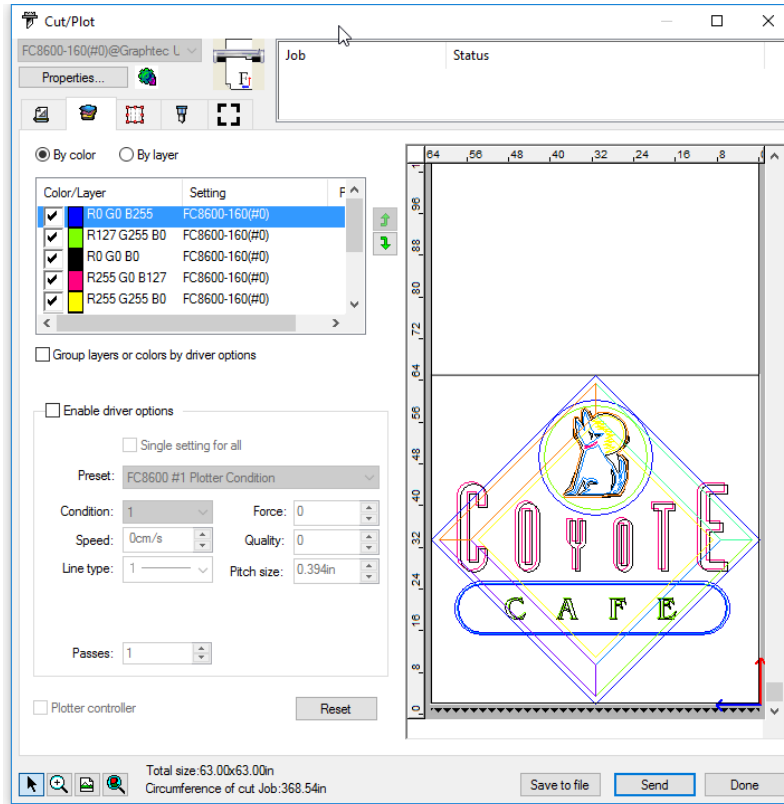


The job's width and height.

		The job's width and height as a percentage of the original.
	Fit to Media	Scales the job proportionally so that it is as large as possible while still fitting within the cuttable area of the output media.
	Proportional	When this option is selected, the height and width of the job are increased or decreased together to keep the original proportions intact.
Position	These settings change the position of the job on the media.	
		The distance between the job and the right and bottom margins of the cuttable area. You can also change these settings by dragging the job across the page in the preview pane.
		Interactive: moves the cutter as you change the position of the job on the preview area.
		Show me: draws a bounding box of the job without lowering the tool.
		Places the job at the specified distances from the lower and right edges of the cuttable area of the output media.
		Centers the job along the width of the cuttable area.
		Centers the job in the middle of the cuttable area. Only available for sheet material.
		Rotates the image on the media in 90-degree increments. Click the button until you achieve the desired orientation.
		Flips the selected image on the vertical axis, so that your image will be mirrored when output.
		The number of copies to be output.
		The amount of space that will exist between the various tiles and/or copies horizontally.
		The amount of space that will exist between the various tiles and/or copies vertically.
Selection Only		Output only the selected objects, not the entire design. This option is enabled if you had objects selected when you opened the dialog.
Repeat Job		Sends the same job again for the number of times specified.
Hold in list		If checked, the job will be held in the Cutting Master 4 queue instead of being automatically output. The job must be output manually from Cutting Master 4.
Use document origin		If not checked, left bottom point of the bounding box of selected objects becomes origin of plotter. If checked, document origin of Illustrator or CorelDRAW becomes origin of plotter. Positions of objects from document origin are kept positions from the plotter origin. Note: Document origin of Illustrator or CorelDRAW is the point (0,0) of the ruler.

4.4. Layer Tab Properties

The layering tab allows you to assign different cutting parameters to different color or layers in your cutting job. You can cut one color slower than another color, for instance.



The following settings are available:

By color/ By layer

Orders your output by color, or by layer. "Layer" refers to layers in the design application, not overlapping layers of vinyl.

- » If you choose By color, all objects with the same color will be cut at the same time, unless Pauses between colors/layers are checked. If you have overlapping objects of the same color, you will get overlapping contour cuts.
- » If you chose By layer, the job will be cut one layer at a time. All objects in each layer will be cut at once, unless Pauses between colors/layers are inserted. If you have overlapping objects in a layer, you will get overlapping contour cuts.



There will be no pause between this color or layer and the next



Group Layers or colors by driver options

Enable driver options

Output will be paused between this color or layer and the next. This allows you to load different colored vinyl into your cutter.

If selected, the groups or layers with the same conditions will be sent together.

Check to set the following options in the software. If this option is not checked, the settings on the output device will be used instead.

Settings can be set individually for each color or layer by selecting the color or layer in the list then setting the options below (but see Single setting for all).

Single setting for all

If this option is checked, identical driver options will be used for all colors or layers.

Preset

Driver option presets allow you to save all of the driver options for a common type of job and reapply them in a single step.

Condition

The cutter condition number. Numbers range from 1 to 8. See the documentation for your cutter for details on which numbers are valid.

Speed

Speed at which the cutting head or pen moves across the media. Set to 0 to use the setting on the cutter.

Force

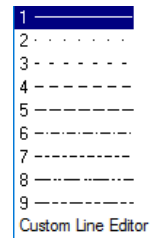
The amount of downwards force applied to the cutting head or pen. Set to 0 to use the setting on the cutter.

Quality

The Quality setting really controls the maximum acceleration of the cutting head or pen. Lower settings produce higher quality, at the cost of increased cutting time. Set to 0 to use the setting on the cutter.

Line Type

Select the line type. The following line types are provided as standard:



You can also edit custom line types with the Custom Line Editor

Pitch Size

The length it takes for the line pattern to repeat when a line type other than solid is selected.

Passes

Defines the number of times that the blade will cut the same path. Set this option if you are using thick or hard media that can't be cut in a single pass.

Plotter Controller

If checked, Cutting Master 4 will send the current job to the Graphtec Plotter Controller application for output when the Send button is clicked. This option is only enabled if the setup is for a device that is supported by the Plotter Controller application. The device setup must use a USB connection. If Plotter Controller is not installed, this option will be disabled. See the Plotter Controller documentation for details on outputting jobs from that application. When this option is checked, the following fields in the cut/plot dialog will be disabled:

- » Job width
- » Job height
- » Percent width
- » Percent height
- » Fit to media
- » Proportional
- » Copies
- » Copy spacing
- » Use registration marks
- » Hold in list
- » After output

In addition, the Rotation control will be limited to the 0 and 90 degrees counterclockwise settings

4.5. Editing Custom Line Types

4.5.1. To Add a New Custom Line Type

- » Select Custom Line Editor from the Line Type list

Custom lines: Add Remove Save

Custom type: Custom 1 Import Export

Custom 1: 0.000in 0.000in 0.000in

Custom 2: 0.000in 0.000in 0.000in

Custom 3: 0.000in 0.000in 0.000in

OK

- » 2. Select one of the 3 custom line **types**.
 - » Custom 1 : The length of the first segment in the line.
 - » Custom 2 : The length of the space between line segments.
 - » Custom 3 :The length of the second and third line segments, if any. Custom 1 is made up of one repeating line segment, while Custom 2 has two segments that repeat in a pattern, and Custom 3 has three.
- » 3. Edit the length of the line segments in the corresponding fields
- » Click Add to Save the new Line type
- » Enter a Name for the custom line type

Save a New Custom Item X

Please enter a custom name:

OK Cancel

- » Click OK

4.5.2. To Modify an existing Custom Line Type:

- » Select the Custom Line from the list
- » Modify the settings for the line type
- » Click Save

4.5.3. To Remove a Custom Line Type

- » Select the Custom Line from the list
- » Click Remove

- » Click Yes

4.5.4. To Export a Custom Line Type

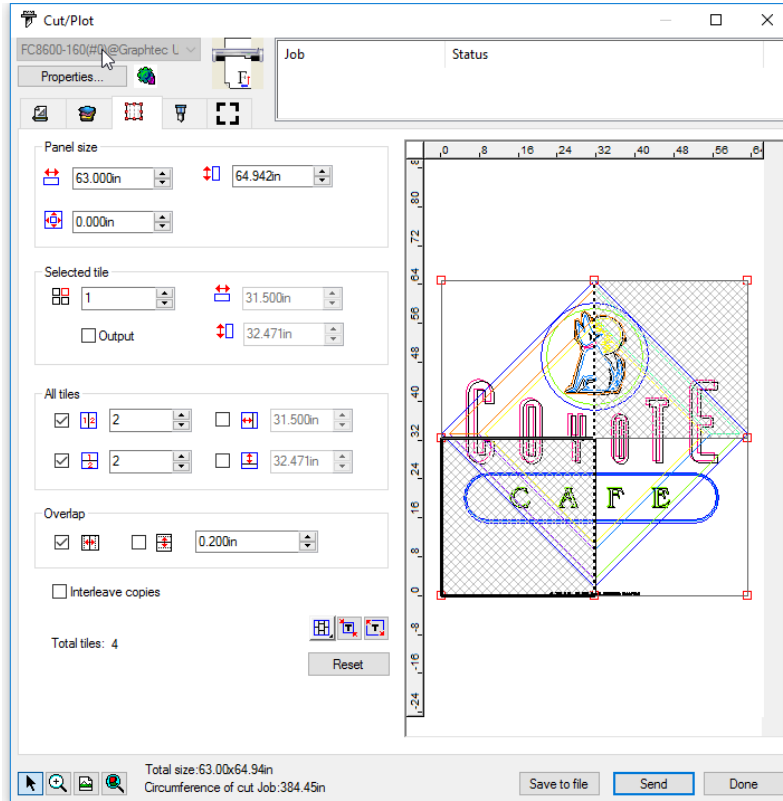
- » Select the Custom Line
- » Click Export
- » Browse for a location to save the file
- » Enter in a File Name
- » Click Save

4.5.5. To Import a Custom Line Type

- » Click Import
- » Browse for the .xml file and click Open

4.6. Panel Tab Properties

The Panel tab allows you to split a job up into a number of smaller tiles that are then output separately



Panel Size

The panel is the part of the job that will be split up into tiles and output by the software. If the panel is reduced in size so that it does not cover the entire job, only the parts covered by the panel will be output.



Shows the width and height of the panel. To adjust, enter a number or use the arrows.



The size of the margin. The margin is the part of the panel that extends outside of the boundaries of the job.

Selected Tile

Selects which tile's width and height are displayed in the fields below.



Selects a tile to be edited. The selected tile is highlighted in the preview pane.



Shows the width and height of the selected tile. To adjust, enter a number or use the arrows.

Output

If checked, the selected tile will be output with the rest of the job. If cleared, the tile is marked with a mesh overlay in the preview pane, and will not be output.

All Tiles

These settings apply to all tiles and help you quickly set up automatic tiles, of equal size.



Selecting this option divides the job vertically into the number of columns specified. Each column will be of equal width.



Selecting this option divides the job into the number of rows specified. All rows will be of equal height.



If you know that you want tiles of a certain size, enter the values for the width and height of the tiles here. All tiles will be changed to the specified size.

Overlap

Specifies the amount of overlap between rows and columns. By overlapping, you can eliminate any gaps between the tiles when assembling the final output. Overlap is measured as the total amount two rows or columns overlap.



Check to create an overlap on the vertical edges of tiles.



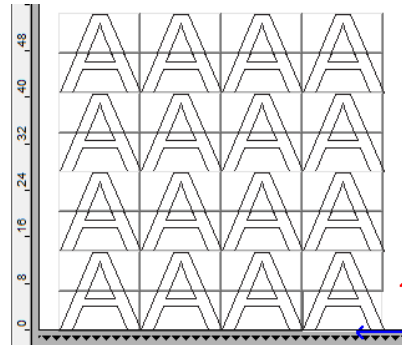
Check to create an overlap on the top and bottom edges of tiles.

The width of the overlap. Enter a negative number to create an offset between tiles.

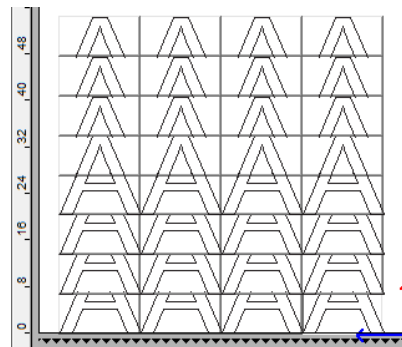
Interleave Copies

In case of multiple copies of tiled objects, this setting defines how the tiles will be grouped

Interleave

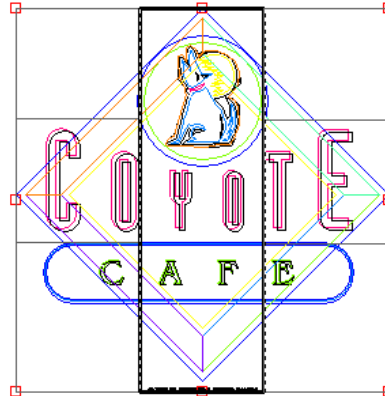


No Interleave

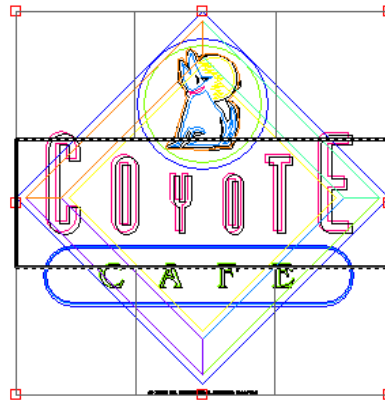




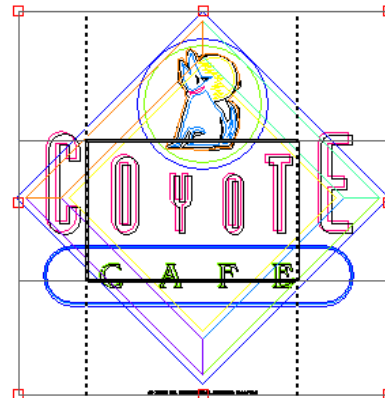
Sets the primary direction of the panel mode to vertical. This allows for the vertical tiles to be split individually horizontally



Sets the primary direction of the panel mode to horizontal. This allows for the tiles to be split individually vertically.



Sets the panel mode to be adjusted both horizontally and vertically.



**Auto-tile**

A tile will automatically be created that includes all selected objects. If no objects are selected, all of the objects in the design will be included. If the design is too large to fit on the selected media, it will automatically be tiled so that each tile is the maximum possible size. Auto-tile does not attempt to tile the entire page, just the design or the selected objects.

**Tile to Border**



The entire design page is automatically tiled. If the page is too large to fit on the selected media, it will be tiled so that each tile is the maximum possible size.


Reset

Resets all settings to their original state

4.7. Dividing a Job into Tiles






The job starts as a single large tile that covers the entire job. This tile is selected by default.

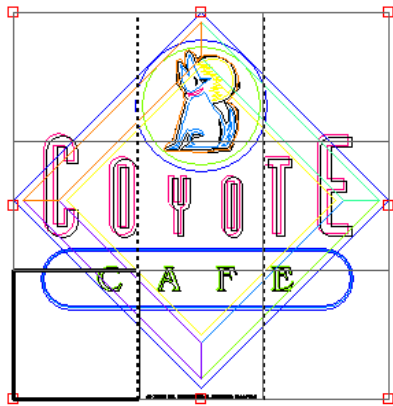
To divide the job into multiple tiles, reduce the width and/or height of the first tile using the  and  fields in the **Selected Tile** section. New tiles will automatically be created to cover the exposed areas of the job.

For instance, to divide a 30x25 job into two vertical tiles, set the  field to 15, reducing the size of the first tile to 15x25. A second 15x25 tile will automatically be created.

4.7.1. Dividing a Job into Uniform Rows and Columns of Tiles






To divide the job into a specified number of uniform rows and columns of tiles:

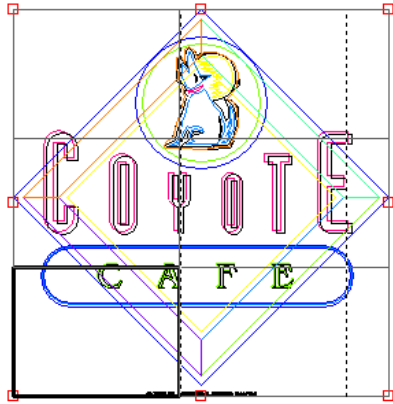
- » Check  or  to tile the job vertically or horizontally.
- » Enter the number of columns of tiles in the  field.
- » Enter the number of rows of tiles in the  field.
- » Set the amount of overlap between the tiles in the  field.



4.7.2. Dividing a Job into Uniform Tiles of a Specified Size

To divide the job into uniform tiles of a specified size:

- » Check  and  to set all tiles in the job to be of the specified size.
- » Set the  and  fields to the width and height desired for the tiles.
- » Set the amount of overlap between the tiles in the  field.





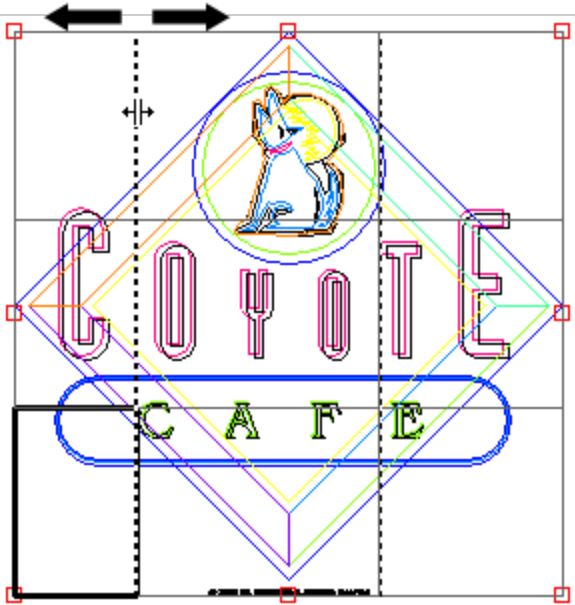
If the specified tiles do not cover the job evenly, the tiles at the top and right edges will be made small enough to fit in the gap.



4.8. Selecting a Tile

To select a tile, either click on the tile in the preview pane, or select the tile using the  field in the Selected Tile section of the Tile tab.

4.9. Editing Tiles

To edit the size of the selected tile, change the values in the  and  fields. You can also resize tiles by dragging their edges in the Preview Pane.



If any of the All Tiles checkboxes are checked, the  and  fields may be disabled. In this case, the fields have been overridden in order to keep all tiles uniform. The tiles will not be editable using the Preview Pane either.

If you drag the edges of the panel over so that part of the job is exposed, a new tile will be created to cover the exposed area of the job. The exception to this is if you resize the panel using the cropping handles.


4.10. Cropping a Job

To crop out part of a job so that it will not be output:

- » Open the Job Properties dialog for the job.
- » Select the Tiling Preview view of the job.
- » Drag the red cropping handles so that the unwanted parts of the job are cropped out.

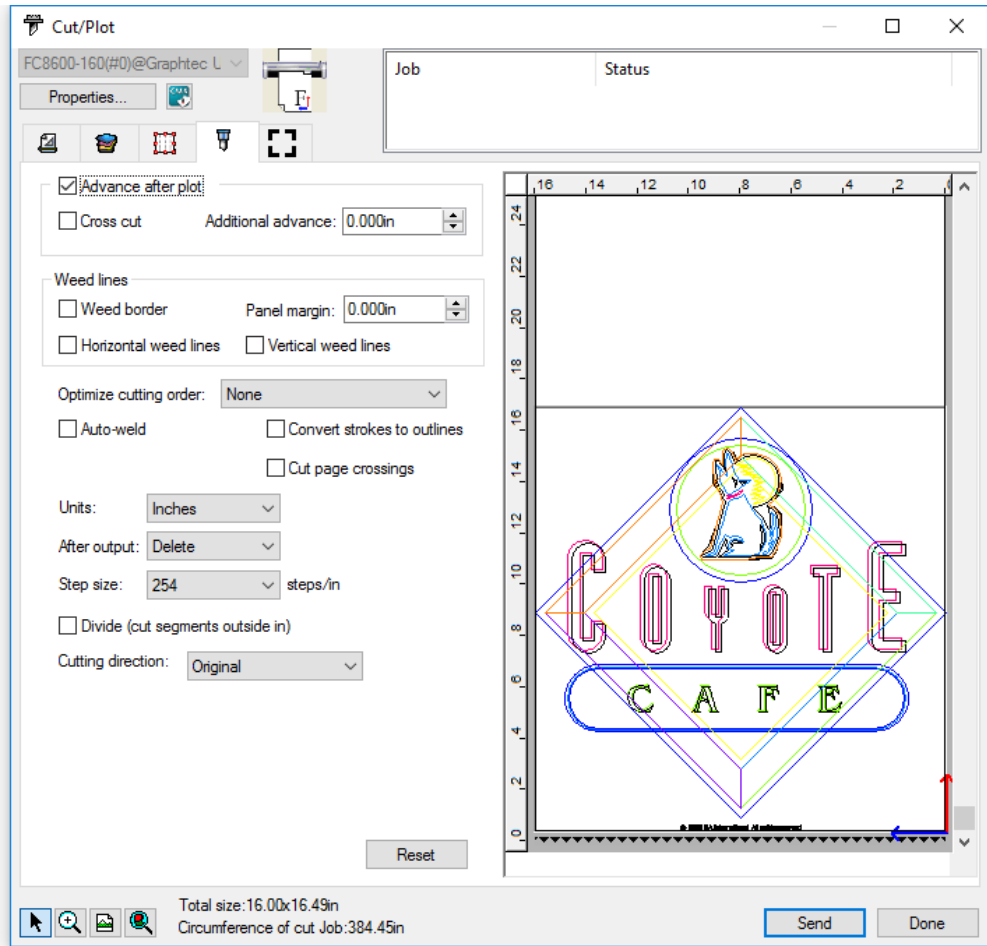


Cropped-out areas of the job will not be output.

You can also crop a job by reducing the panel size using the ,  and  fields in the Panel Size section of the Tile tab.

4.11. Advanced Tab Properties

The Advanced tab allows you to set several options specific to cutting jobs.



The following settings are available:

Advance after plot

Advances the media after the job has been output and resets the origin.

Cross cut

If checked, after a job has been cut, the cutter will slice across the output media above the job, separating it from the rest of the media still in the cutter.

For a multi-page job, the cutter will do a cross-cut after each page in the job.

This option is only enabled for cutters that support the feature

Additional advance

Advances the media an additional amount after the job has been output.

Weed Border

Cuts a border with the specified Panel margin around all objects in the selected color and layer.



The weed border is always a solid line, regardless of any settings in the Layering tab.

The panel margin used for the weed border.

Panel Margin

Horizontal weed lines

Adds weedlines between lines of text (or objects). Weedlines are always solid lines, regardless of the line settings in the Layering tab.

Vertical weed lines

Adds weedlines between characters (or objects). Weedlines are always solid lines, regardless of the line settings in the Layering tab.

Optimize cutting order

Select the order in which objects in the design will be cut:

None

The objects are cut or plot in the order they were created

Speed Priority

The objects will be cut in an order that maximizes cutting speed.

Restrict Media Movement

The objects will be cut in an order that minimizes the amount that the media has to move.

Auto-weld

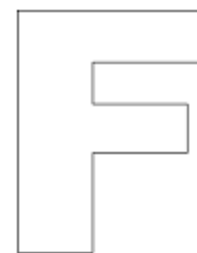
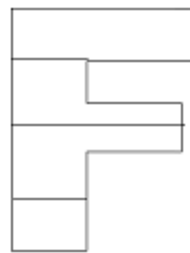
Removes overlapping areas of objects that have the same color.

Convert strokes to outlines

Selects whether the strokes will be cut separately as an object.

Cut page crossing

When the output is split up over a number of pages, cut page crossing will cut a line between 2 pages



Cut Page Crossing ON

Cut Page Crossing OFF

Units

Specifies the units that will be used for measurements.

After output

Sets what will be done with the file after it is output. Select either Delete or Hold.

Step size

The number of steps per unit length currently set on your cutter.

Divide

Always cuts segments from the outside in

Cutting Direction

Sets the direction in which objects will be cut

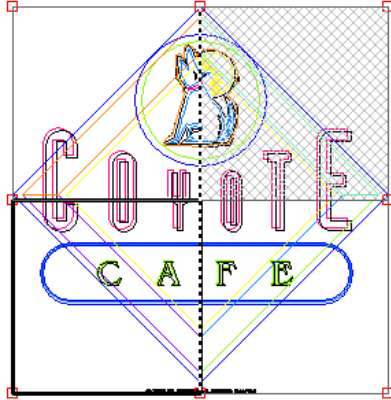
	Original	Maintains the direction that was assigned in the design application
	Clockwise	Overrides the assigned direction. All objects will be cut clockwise
	Counter Clockwise	Overrides the assigned direction. All objects will be cut counter clockwise
Reset		Restores all settings to their original state

4.12. Preventing Tiles from Being Output

To disable a tile and prevent it from being output with the rest of the job, do one of the following:

- » Double-click on the tile in the preview pane.
- » Right-click on the tile in the preview pane.

Disabled tiles are marked with a hash pattern.

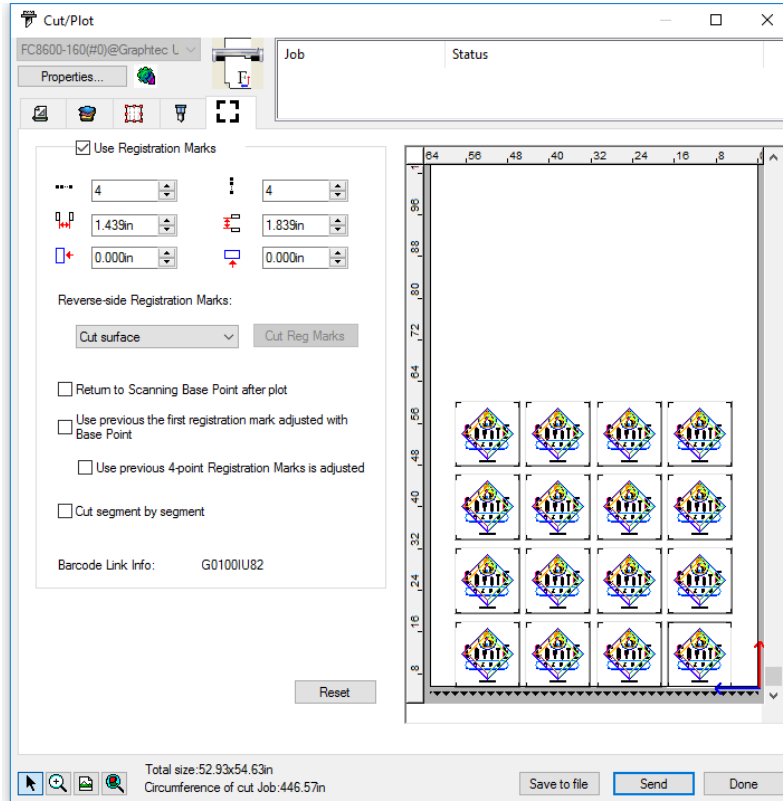


To make a disabled tile able to be output again, double-click or right-click the disabled tile a second time.

One tile in each job must always be enabled. If you try to disable all of the tiles, one of the other tiles will become enabled again.







4.13. Registration Marks Tab Properties

The options on this tab are only available if Registration Marks were added to the design first.



The following parameters are available

Use Registration Marks If your design contains registration marks, this option will be enabled by default.

- 
 Number of copies horizontally
- 
 Number of copies vertically
- 
 Spacing in between horizontal copies
- 
 Spacing in between vertical copies
- 
 Horizontal offset
- 
 Vertical offset

Reverse-side Registration Marks	<p>This option allows you to cut out the registration marks on the printed side so they can be measured when cutting the back side. This is necessary when cutting a box for example, where certain paths need to be scored from the back.</p> <p>Cut Surface</p> <p>Cut back Side (Low Volume Production)</p> <p>Cut back Side (High Volume Production)</p>
Return to Scanning Base Point after Plot	Moves the tool head to the base point after cutting.
Use previous the first registration mark adjusted with Base Point	Performs a one-point reading on four-point registration marks
Use previous 4-point Registration Mark adjusted	Four-point registration marks are performed on the first sheet. In case of cutting multiple copies, only one-point registration marks are performed from the second sheet onwards.
Cut segment by segment	Cuts all the objects in a segment before proceeding to the next segment.
Reset	Resets all parameters to their defaults

4.14. Working with Driver Option Presets

Driver option presets allow you to save all of the driver options for a common type of job and reapply them in a single step.

4.14.1. Creating Presets

To save the current driver options as a new preset:

- » From the Preset list, select Save as.



- » Enter a name for the new preset.
- » Click OK.

4.14.2. Updating Presets

To update the currently selected preset with the currently selected driver options, from the Preset list, select Save.

4.14.3. Applying a Preset

To apply the driver options saved in a preset to the current job, select the preset from the Preset list.

4.14.4. Renaming a Preset

To rename a preset:

- » Select the preset you want to rename from the Preset list.
- » Select the Rename command from the Preset list.
- » Type in the new name and press OK.

4.14.5. Deleting a Preset

To delete a preset:

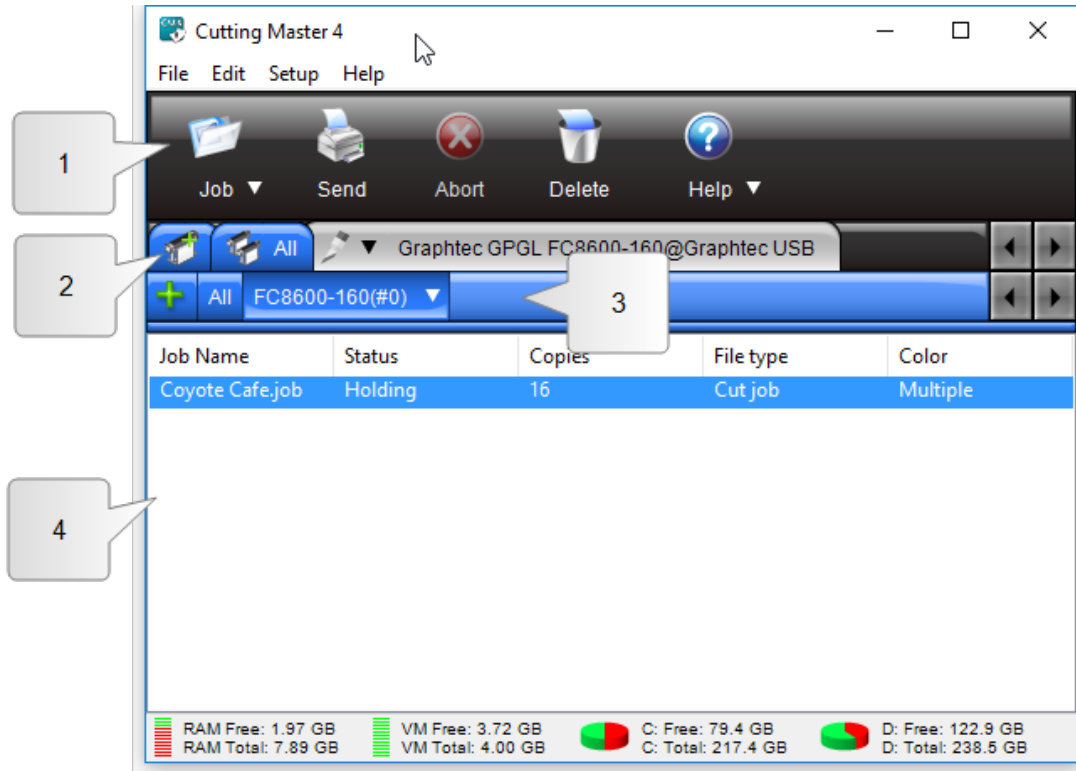
- » Select the preset you want to delete from the Preset list.
- » Select the Delete command from the Preset list.
- » Click Yes.

CHAPTER

Outputting Jobs from Cutting Master

5.1. Basic Elements of Cutting Master

The following are the basic elements of Cutting Master :



1	Toolbar
2	Device Bar
3	Setup Bar
4	Job Area

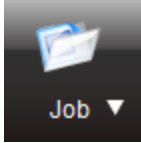
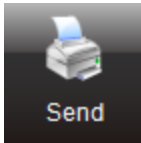
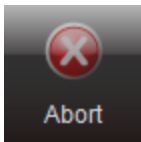
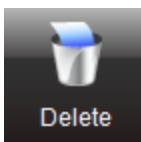
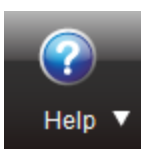
5.1.1. Column Headings

Job Name	The file name of the job
Status	The current status of the job.
Copies	The number of copies to be output.
File Type	The type of job.
Color	The color specified for the material. If multiple colors are specified, this field will read Multiple.

5.1.2. Toolbar

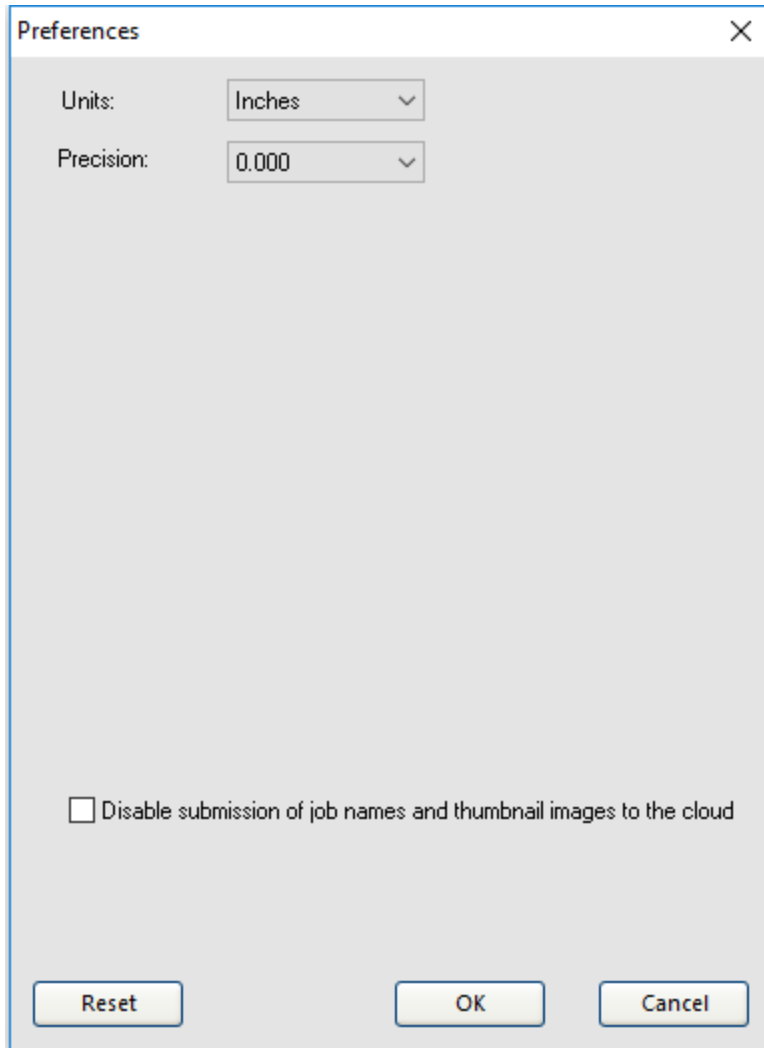
A toolbar is located at the top of the main window. It contains tools for the most commonly used functions.

The toolbar functions are:

	Add Job	Adds a Adjob to the selected output device.
	Send Job	Sends the selected job to the output device.
	Abort	Stops selected file from being output.
	Delete	Deletes the selected job or jobs.
	Help	Opens the Online Help

5.2. Setting Application Preferences

To set application preferences, from the Edit menu select Preferences.



The following settings are available:

Units	The units of measurement displayed
Precision	The degree of precision to use with measurements
Disable submission of job names and thumbnail images to the cloud	Job Names and Thumbnails are stored in your SAi Cloud account so you can access them via tools such as job reporting in the SAi Mobile App. With this checkbox you can disable sending those to your Cloud account

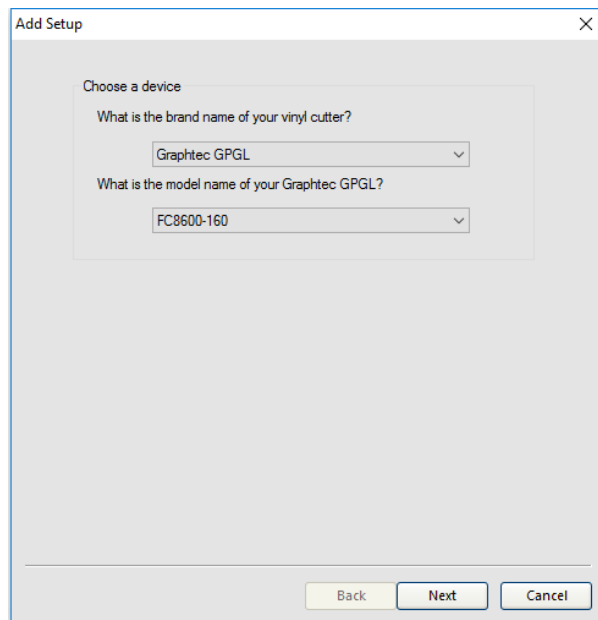
5.3. Creating an Output Device

The output device setup provides the link between the software and your output device. It contains the following information:

- » The type of output device being used.
- » The method used to communicate with the device.

5.3.1. Creating Your First Output Device Setup

When you start the software for the first time, you are prompted to create your first output device setup:

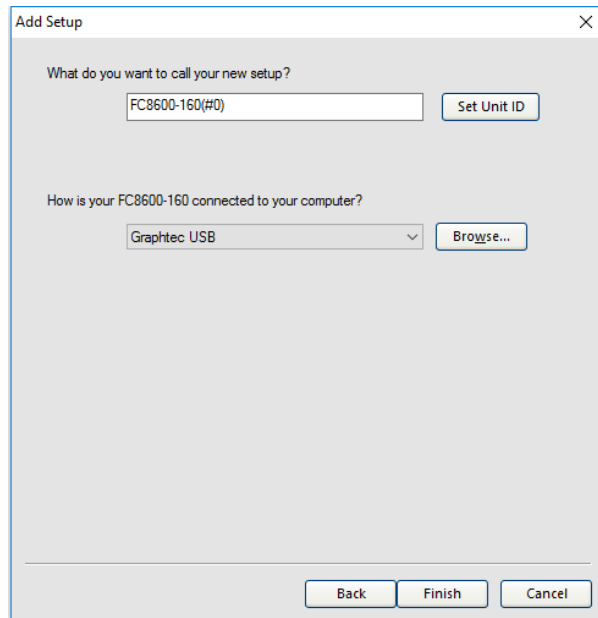


The screenshot shows a dialog box titled "Add Setup" with a close button (X) in the top right corner. The main content area is titled "Choose a device" and contains two questions with corresponding dropdown menus:

- Question: "What is the brand name of your vinyl cutter?"
Selected value: "Graphtec GPGI"
- Question: "What is the model name of your Graphtec GPGI?"
Selected value: "FC8600-160"

At the bottom of the dialog, there are three buttons: "Back", "Next", and "Cancel".

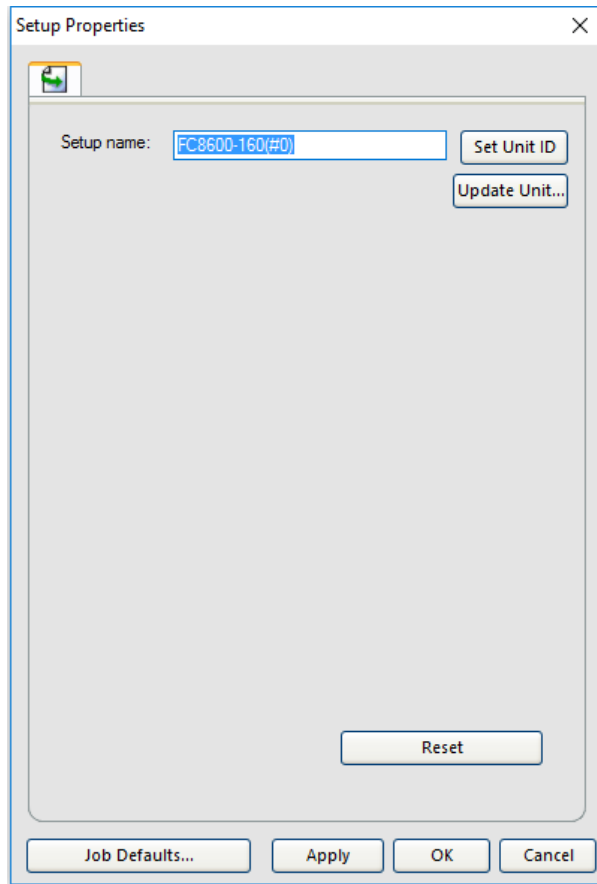
- » Select the Manufacturer and Model Name of the output device from the list.
- » Click Next.



- » Edit the Setup name of the device.
- » Assign a unit ID number to your device. If you have more than one cutter of the same model, this will make it easier to identify which cutter is which.
- » 5. Select the Port the output device uses for communication. If necessary, edit the communications settings for the chosen port.
- » Click Finish

5.3.2. Editing Output Device Settings

To edit the properties associated with the output device setup, from the Setup menu, select Setup Properties.



Setup Name Name of the Setup
 Set Unit ID
 Update Unit ID

5.3.3. Changing the port of the Setup

To change the port of a Device Setup, do one of the following :

- » Select Change Device Port from the Setup menu
- » Click the Arrow down on the left hand side of the device in the device toolbar and click Change Port

Port	Select the port to which the cutter is connected. The port list is limited to the ports that are actually present on your computer and usable with your output device.
USB	USB drivers are provided with output devices that support them. Please make sure the proper drivers are installed when using these ports.
TCP/IP	If your cutter is connected via TCP/IP, enter in the IP address of the cutter
COM	Serial communications port. This port is supported by some of the older cutter models.

5.4. Outputting a Test Cut Job

The software allows you to output test cutting jobs to appropriate output devices, to make sure everything is functioning properly.

To output a test cut job, from the **Setup** menu, select **Test Cut**.

5.5. Outputting Jobs

If the Hold in list box in the General tab of the Cut/Plot dialog is not checked, jobs that are sent to Cutting Master will be output automatically as soon as they are received.

If Hold in list is checked, the job will stay in the queue until you output it manually.

5.5.1. Saving a Job to a File

To save a job to a .PLT file, do one of the following:

- » Right Click the Job and select Save As
- » Select the job and choose Save As from the File Menu
- » Change the Port of the device to File. With this option, all jobs sent to the device will be saved to a file instead of being output.

5.5.2. Loading a Saved Job from a File

To load a previously-saved job from a file:

- » From the File menu, select Add Job.
- » Select the .plt file to be added.
- » If you want to copy the file to the local job folder, check Copy to job folder.
- » Click Add

5.5.3. Sending Jobs to the Cutter

To send a job to the cutter, do one of the following:

- » Select the job and from the File menu, select Send.
- » Select the job, then click on the Send button in the toolbar.
- » Right-click the job and select Send from the context menu.

5.5.4. Aborting the Processing of a Job

To abort the processing of a job while it is being cut, do one of the following:

- » Select the job and from the File menu, select Abort.
- » Select the job, then click on the Abort button in the toolbar.
- » Right-click the job, then select Abort from the context menu.

5.5.5. Deleting Jobs

To delete a job, do one of the following:

- » Select the job and press the Delete or Backspace key on your keyboard.
- » Select the job and from the Edit menu, select Delete.
- » Select the job, then click on the Delete button in the toolbar.
- » Right-click the job, then select Delete from the context menu.

CHAPTER

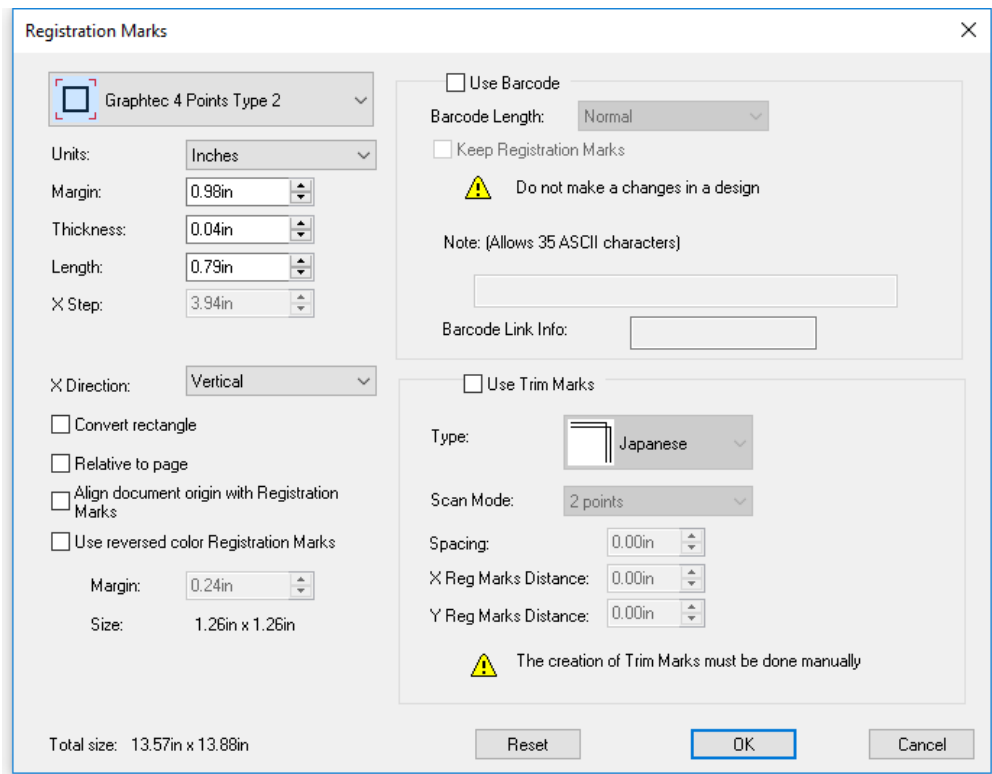
Contour Cutting Using Cutting
Master

6.1. Adding Registration Marks Automatically

If no object is selected, Cutting Master will automatically add registration marks around your design.

To add registration marks to your design:

- » Open your job in the design application.
- » Access the Registration Marks dialog using one of the following methods:
 - » In Adobe Illustrator, from the File menu, select Cutting Master 4 then Registration marks.
 - » In CorelDRAW, select Registration Marks from the Corel Application Launcher. The Corel Application Launcher is a list in the standard toolbar that lets you launch other applications from within CorelDRAW.



- » Select the desired registration mark from the topmost list.
- » Set the necessary parameters and click OK

The following parameters can be set :

Units	The unit of measurement.
Margin	The distance between the registration marks and the job.
Thickness	The thickness of the line that makes up the registration marks.
Length	The size of the registration marks, measured along one side.

X Step	This option is only available when Segment Area Registration Marks are selected. This controls the distance from one segment mark to the next.
X Direction	Set which side of the page will be considered the X access. This will affect where the barcode will be added.
Convert Rectangle	If checked, the registration marks will be placed around the border of the selected rectangle. The rectangle will then be deleted, leaving only the registration marks.
Relative to Page	Relative to Page creates the Registration Marks relative to the edge of a page, instead of to objects.
Align document origin with Registration Marks	If checked, left bottom point of the registration marks becomes (0,0) point of ruler of Illustrator or CorelDRAW. If add the registration marks without check this check box, move the (0,0) point of ruler to left bottom point of the registration marks before send the job to cutter.
Use Reversed Color Registration Marks	If checked, the registration marks will be white with a black square around them. <ul style="list-style-type: none"> Margin Specify the margin for the square around the registration mark Size Displays the final size of the reversed color registration mark
Use Barcode	Enable Barcode. This prints a barcode along with the registration marks
Barcode Length	Choose the length of the barcode.
Keep Registration Marks	Arrange the barcode without change the spacing and shape of the registration marks.
Note	Add text to be printed with the barcode. The maximum length is 35 ASCII characters
Barcode Link Info	Displays the barcode link info. This is the number that is recognized by the cutter when cutting the page
Use Trim Marks for the Registration Marks	Check this option if you are using pattern3 registration marks, which are either Japanese or Roman style. Trim marks have to be added manually.
Scan Mode	Select the inclination adjustment that has been set on the cutter
Spacing	Specify the distance between registration marks.
X Reg Marks Distance	Specify the distance between the registration marks in the X direction
Y Reg Marks Distance	Specify the distance between the registration marks in the Y direction

6.2. Contour Cutting

Cutting Master allows you to use a cutter to cut a contour on printed output generated on a separate printer. This produces output similar to that of a hybrid printer/cutter device.

In order to cut a contour on a printed job, you need to do the following:

- » Create the design for the job in your design application.
- » Add registration marks that will allow Cutting Master to align the cut contour with the printed job.
- » Output the printed parts of your design.
- » Load the printed media into your cutter.
- » Output the contour part of your design on your cutter.

6.3. Cutting the Job

To output the contour cut part of your design:

- » Hide the layer or layers that contain the printed part of your design.
- » Make sure the layer or layers that contain the contour cuts are visible.
- » Use the Cut/Plot dialog to send the output to Cutting Master.
- » Send the cut job to the cutter from Cutting Master, if necessary.

6.4. Designing a Job for Contour Cutting

When designing a job for contour cutting, the most important thing is that you should be able to separate the printed parts of the job from the cut parts of the job.

This can be done in two ways:

- » By placing printed and cut elements on separate layers and then hiding the layers you do not want to output.
- » By manually selecting the elements you want to print or cut, and then printing or cutting only the selected elements.

Of these two methods, we recommend using separate layers to isolate printed and cut elements, as this works much better with complex designs.

6.4.1. Adding Registration Marks

The Cutting Master plug-in allows you to add registration marks to your design. These registration marks can then be used to align a contour cut with the printed output.

The registration marks are added in their own separate, locked layer of the design.



Do not change the name assigned to the layer containing the registration marks.

The registration marks must be printed out in order to be used for automatic alignment of a contour cut. The marks themselves will not be contour cut.

There are two ways to add registration marks to a design:

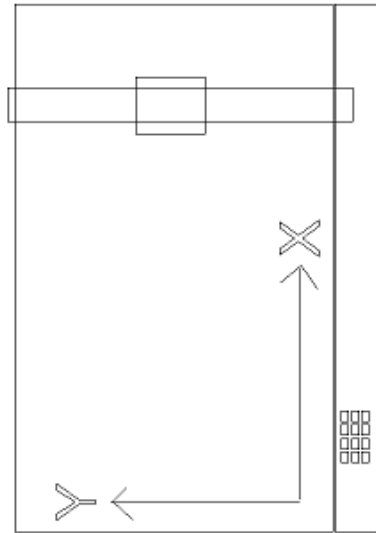
- » Adding registration marks automatically.
- » Adding a rectangle to the design and replacing it with registration marks.

If the design is changed or resized after the registration marks are added, you will need to remove the registration marks and add them again in order to properly indicate the new size of the job. Registration marks do not automatically update when a job is edited or resized.

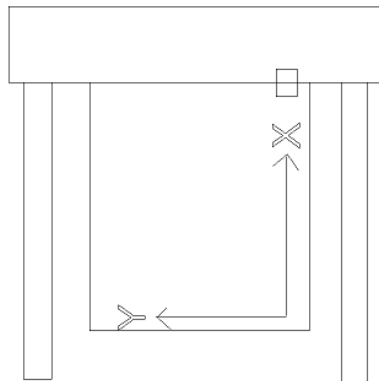
6.5. Loading the Printed Media into Your Cutter

Once the printed parts of the job have been output, allow the ink to dry (if necessary), then remove the media from the printer and load it into your cutter.

Be sure to orient the printed media so that the registration marks are not upside down, as this can cause problems.



On a Flatbed type of cutter



On a roll cutter

Load the media into the cutter then position the head over the registration mark located at the bottom right corner when facing the cutter.

6.6. Printing the Job

To output the printed parts of the design:

- » Hide the layer or layers which contain the contour cuts.
- » Make sure the layer or layers which contain the printed part of the design are visible.
- » Use the standard printing function of the design application to send the job to your printer.

6.7. Removing Registration Marks

To remove the registration marks, do one of the following:

- » Repeat the procedure used to add the marks, but select None.
- » Unlock and delete the layer that contains the registration marks.

6.8. Replacing a Rectangle with Registration Marks

If a rectangle is created in the design application, and is selected when the Registration Marks dialog is opened, Cutting Master 4 can use it as a bounding box for the registration marks. The registration marks will be placed on the border of the rectangle, and then the rectangle will be deleted, leaving only the registration marks.

To replace a rectangle with registration marks:

- » Open your job in the design application.
- » Draw the rectangle that you want to use as a bounding box.
- » Access the Registration Marks dialog (see previous instructions).
- » Make sure the Convert Rectangle option is checked.
- » Set any other desired options (see previous instructions).
- » Click OK.