

WinPlot

SOFTWARE UTILITY for all SUMMA CUTTING DEVICES

Transferring a graphic to WinPlot

Working with Plug-in

The easiest way to get the graphic into WinPlot is using a plug-in, if it exists.

Plug-in for Corel

The Toolbar in Corel contains three icons.



The first icon is used to set OPOS markers around objects. If the icon is clicked, then following things happen:

- A new layer called 'Regmark' is created
- All objects in all unlocked layers are selected.
- OPOS markers of 3mm are put around them and an OPOS XY line is added at the bottom.
- The Regmark layer is locked.

If the second icon is clicked, then following things happen:

- The Regmak layer is temporarily unlocked (just for exporting).
- All objects in unlocked layers and in layers where the printing/exporting is not disabled are selected.
- All selected objects are exported to a temporarily file.
- WinPlot is started.
- Temporarily file is imported in WinPlot.
- The Regmark layer is locked.

If the third icon is clicked, then following things happen:

- All selected objects (by user) are exported to a temporarily file.
- WinPlot is started.
- Temporarily file is imported in WinPlot.
- The Regmark layer is locked.

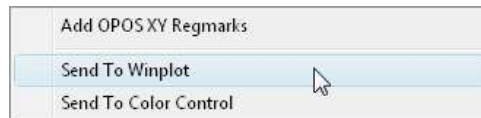
Note: Do not use the third icon when doing print and cut jobs, otherwise the markers will not be exported, see procedure in the section about print & cut. After sending the objects to WinPlot, the Regmark layer is locked automatically even if the user unlocked it.

Plug-in for Illustrator

When the plug-in is installed then a script is installed to open WinPlot automatically and import the selected objects into it.

Click on **File // Summa // Send to WinPlot**.

The extra menu under file has three sub menu's. The third is for the DC4(sx).



The Add OPOS XY Regmarks sub menu is used to set OPOS markers around objects. Following things happen:

- A new layer called 'Regmark' is created
- All objects in all unlocked layers are selected.
- OPOS markers of 3mm are put around them and an OPOS XY line is added at the bottom.
- The Regmark layer is locked.

With the Send to Winplot sub menu following things happen:

- There is first a check if all changes in the drawing up to the moment where the script is started, are saved. If not, then the file is first saved automatically. If the file has never been saved, then Illustrator will prompt the user for a file name.
- The Regmark layer is temporarily unlocked (just for saving).
- All objects in the design are selected.
- All selected objects are saved to a temporarily file.
- WinPlot is started.
- Temporarily file is imported in WinPlot.

Note: The revert and undo commands in Illustrator do not work anymore just after that the design has been imported in WinPlot. Therefore it is recommended to save the design under another name if not all objects need to be imported in WinPlot.

Exporting a Graphic by hand

Exporting from CorelDraw for WinPlot

Make sure all objects are outlines and preferably not filled (if objects are both filled and have an outline with a color, then all objects will appear twice upon one another in WinPlot and thus be cut twice).

Click on **File // Export**. Choose as type eps. Make sure that in the export filter the option convert text to curves is checked. It is also recommended to set post script level to level1.

Exporting from Illustrator for WinPlot

Make sure all objects are outlines and preferably not filled.

Select all text and click on **Type // Create outlines**. It is also recommended to make sure that the text is either filled or has a colored outline with a hairline thickness, not both at the same time.

Make sure to export to the correct version of Adobe Illustrator.

- For Illustrator versions up to 10: click on **File // Save As**. In the Illustrator Native Format Options window, choose Illustrator 7.
- For Illustrator versions CS: click on **File // Export**. Choose as file type Adobe Illustrator Legacy. In the Illustrator Legacy Options window, choose Illustrator 3.
- For Illustrator versions CS2 on: click on **File // Save As**. Choose as file type Adobe Illustrator. In the Illustrator Options window, choose Illustrator 3.

Exporting from FreeHand for WinPlot

Make sure all objects are outlines and preferably not filled.

Select all text and click **Text // Convert to paths**. It is also recommended to make sure that the text is either filled or has a colored outline with a hairline thickness, not both at the same time.

Click on **File // Export**. Choose as type ai. In The Export Document window choose Adobe Illustrator 3.0/4.0.

Using another design program

Make sure all objects are outlines and not filled.

Text has to be converted to curves or they will not show up in WinPlot. If the text is converted to curves while designing, then choose to export as an adobe illustrator file (ai) version 3 if possible. If converting text to curves is used while exporting, then convert text to curves in the eps export filter. Use postscript level 1 if possible.

Importing a graphic


Importing a graphic in WinPlot

1. Start WinPlot.
2. Click **Design // Open...**
The "Open" window appears.
3. Set file type to the same type as chosen while exporting the design.
4. Navigate to the file that was saved or exported in the design software.
5. Open the file.

The following procedure lists the basics about cutting a graphic.

New Roll

The new roll icon can be used to define a new working space on the roll of vinyl. It is used when a new roll is loaded or to advance beyond a job that has been cut.

Click  to start a new roll.

If more than one cutter is installed, WinPlot will ask to select the desired cutter. Click if necessary on the desired cutter.

If WinPlot was just opened, then a window will open showing the size of the loaded media or working space. Click OK to confirm.

If a job has already been send to the cutter and the feed option was not chosen (see output setup details options below), then WinPlot will ask the user whether the media has to be transported to the end of the previous job or not. Select OK to move to the end of the previous job, or cancel to work further in the same working space.

Cutting a graphic

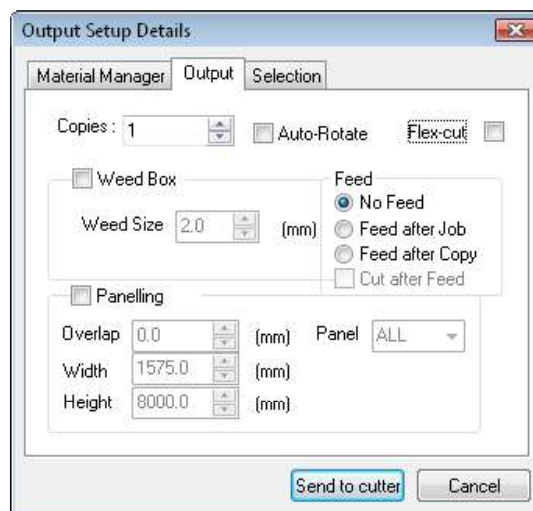
Transfer a graphic to WinPlot.

Click  to send the graphic to the cutter.

The "Output Setup Details" window opens. It has three tabs.

First tab gives extra info of the destination.

The second tab:



Use copies if more than one copy of the design is needed the option Autorotate is only useful when nesting is used.

Flex-cut activates the flex-cut option in the cutter (check cutter user manual for more info on Flex-cut)

NOTE: "red" lines means that lines are created as 100% Magenta and 100% yellow in a CMYK space.

No feed activates the internal nesting option of WinPlot (see Nesting).

Feed after job moves the media forward after the job is cut and defines a new origin point.

Feed after copy does the same, but now after each copy (when multiple copies are asked for). This disables the nesting option.

Cut after feed is only for S class type cutter. WinPlot send a cut off command just before it defines the new origin when a feed after job or copy is chosen.

Weeding box cuts a rectangle around the bounding box of the job. There exists the possibility to define a margin between this bounding box and the weeding box.

Paneling is used if the width of the design is larger than width of the loaded media.

The size of the panel can be set and also the overlap.

Panels can be cut out separately also.

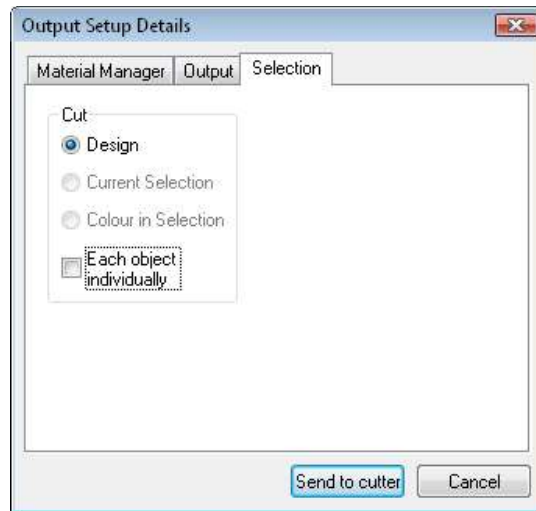
! Do not use feed option or set a weeding box when paneling!

NOTE: When a dual head is installed, "red lines" have 2 functions:

Cutting tool is set on extra pen => plotting is first done with extra pen, then the red lines are cut with tangential knife in flexcut mode

Cutting tool is set on tangential knife => cutting is first done with tangential knife, red lines are then plotted with extra pen.

The third tab:



The third tab can be used to cut by color, cut only the selected object , cut all or cut each object separate.

To cut by color, choose an object of the color that needs to be cut out and then select 'colour in selection' in the third tab.

NOTE: 'current selection' or 'colour in selection' disables automatically the flexcut option.

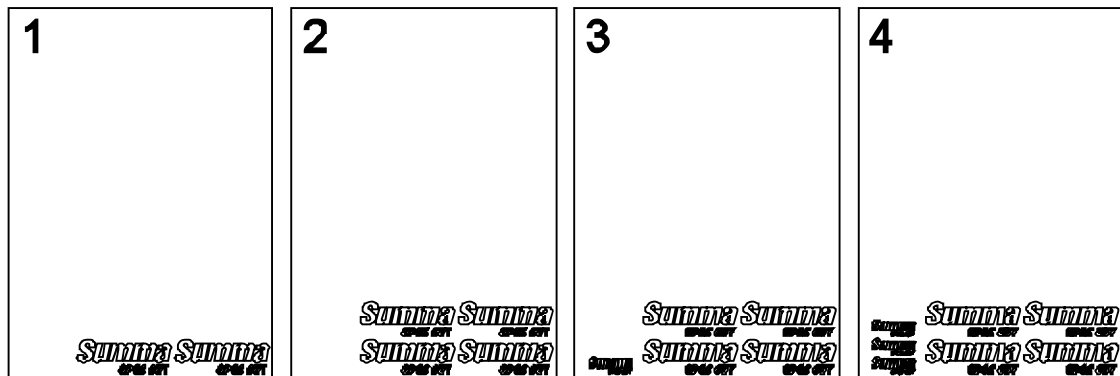
Click on 'send to cutter' to send the data to the cutter.

Nesting

To conserve material, WinPlot evaluates the size of each graphic and determines whether it can be cut out of material left over from previous cuts. In the following example, two copies of a graphic have been cut side by side in the material (1). WinPlot then places the next two copies in a row above the first (2). The next graphic is small enough that WinPlot can place it in the uncut material to the left of the larger graphics (3, 4).

This feature will work if...

- No Feed is chosen in the output option menu
- The “New Roll” button (🔄) has not been clicked.
- WinPlot was not closed between cuts.
- The cutter’s origin was not moved using the cutter’s keypad.
- SummaCut cutters are using firmware higher than revision 10.
- SummaSign Pro cutters are using firmware higher than revision 22
- This feature works well on all SummaSign Pro SL and S class cutters.



Graphic placement

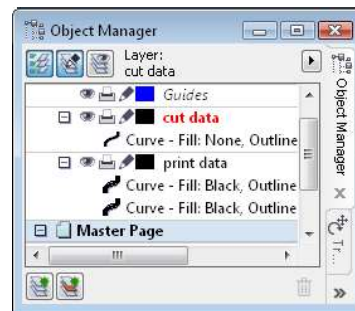
Using OPOS plug-in With Corel

Creating the graphic

1. Use your design software to create the graphic that you want to print and cut. It is recommended to work with layers so that the print data is in one layer and the cut lines are in another layer.



Graphic to be printed and cut



Usage of layers

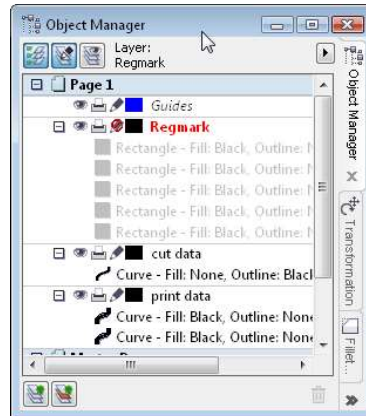
2. Insert OPOS registration markers around the graphic using the plug-in. Click on the Markers icon.



Inserting markers



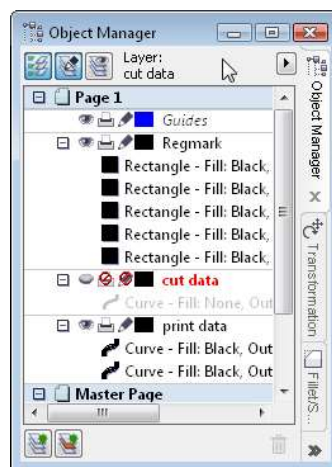
Graphic with OPOS markers



Usage of layers

Printing the graphic

1. Disable the layer with the cut data for exporting or printing (it is recommended to hide it also, like this a visual check can be done).
2. Export to an eps file that can be imported into the RIP.
3. Make sure there is at least a 1 cm (0.4in) margin beyond each of the graphic's four OPOS markers. A 2cm (0.8in) margin is preferable.
4. Leave a margin of at least 4 cm (1.57in) following the print when using sheets or when cutting the print off a roll.
5. Print the graphic.



Setting up layers to export for printing


Contour Cutting the graphic

1. Disable the layer with the print data for exporting or printing (it is recommended to hide it also, like this a visual check can be done).
2. Click on the send to WinPlot icon.

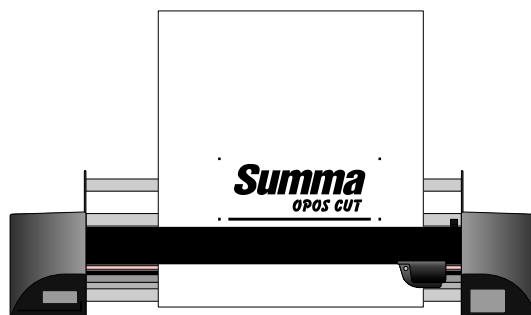
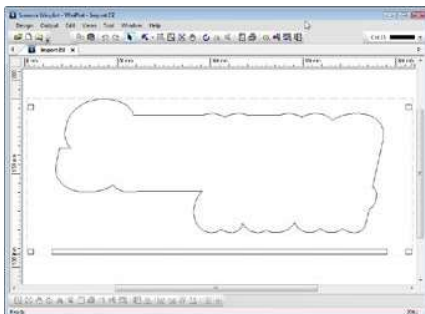


Send to WinPlot


NOTE: All objects in unlocked layers and in layers where the printing/exporting is not disabled are automatically selected. If certain vector data does not need to be printed out, then move it to an extra layer and disable also for exporting before clicking on the send to WinPlot icon.

3. Load the printed graphic into the cutter.
4. If necessary, rotate the graphic so that its orientation on the screen matches its orientation in the cutter.
 - A. Click **Edit // Select All** to select the entire graphic.
 - B. Click  and then press **N** on your keyboard.

The "Rotate" window opens.
 - C. Place a check mark in the **Preview** box.
 - D. Click the radio buttons for the 8 degree values until the graphic's orientation matches its orientation in the cutter.
 - E. If necessary, click on the **Free** radio button and fine-tune the orientation.
 - F. Click **OK** when the graphic is properly oriented.



The graphic's orientation on the screen must match its orientation in the cutter

5. Click  to send the graphic to the cutter.

The "Output Setup Details" window opens

6. Click **Send to Cutter**.

The cutter's LCD displays "Set knife above first marker".

7. Using the cutter's four navigation keys, position the knife above the graphic's origin marker (the marker at the bottom right-hand corner of the graphic).

8. Press the cutter's "Enter" key.

The cutter will register the OPOS markers and then cut out the graphic.

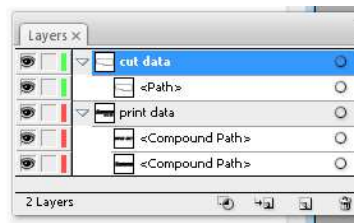
Using OPOS plug-in With Illustrator

Creating the graphic

1. Use your design software to create the graphic that you want to print and cut. It is recommended to work with layers so that the print data is in one layer and the cut lines are in another layer.

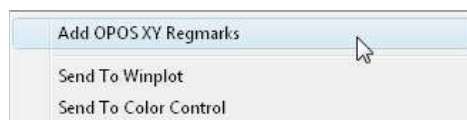


Graphic to be printed and cut



Usage of layers

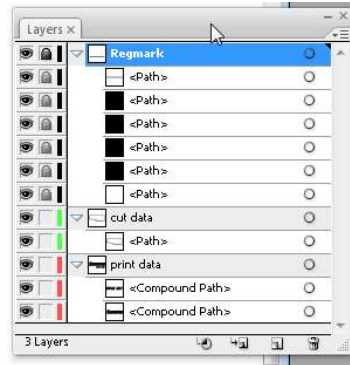
2. Insert OPOS registration markers around the graphic using the plug-in. Click on the Markers icon in Corel. Or go to **File //Summa//Add OPOS XY Regmarks** for Illustrator



Inserting markers in Illusatrator



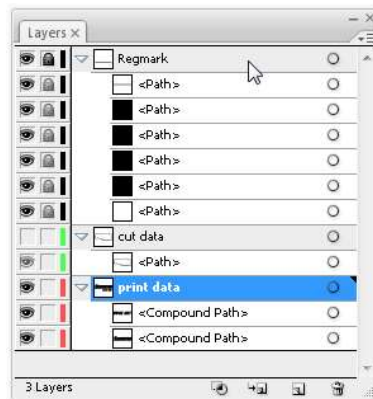
Graphic with OPOS markers



Usage of layers

Printing a graphic with Illustrator

1. Toggle the visibility of the layer with the cut data.
2. Save as an eps file that can be imported into the RIP.
3. Make sure there is at least a 1 cm (0.4in) margin beyond each of the graphic's four OPOS markers. A 2cm (0.8in) margin is preferable.
4. Leave a margin of at least 4 cm (1.57in) following the print when using sheets or when cutting the print off a roll.
5. Print the graphic.



Setting up layers to export for printing in Illustrator

Contour Cutting the graphic


Note:

1. The plug-in for sending the data from Illustrator to WinPlot selects all the data in the current open file, regardless whether it is hidden, locked or set not to print. It then sends all those objects to WinPlot.
2. The revert- and undo-commands in Illustrator do not work anymore just after that the design has been imported in WinPlot.
Therefore it is recommended to save the design under another name if not all objects need to be imported in WinPlot.

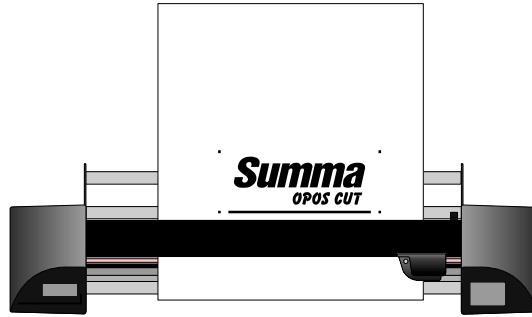
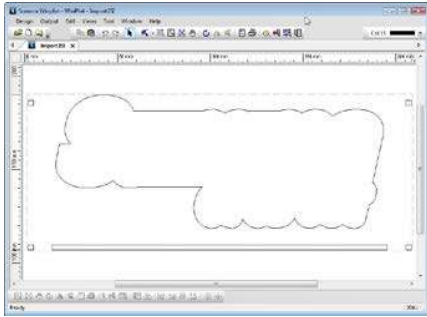
1. Toggle the visibility of the layer with the printing data. Check if that is the correct data that needs to be send to the cutter. If certain vector data does not need to be printed out, then move it to an extra layer and toggle also its visibility.
2. If the data is correct, then delete the not visible layers. Save the design under another name (e.g. save the original_name.ai as original_name_cut_data.ai).
3. Go to **File//Summa//Send to WinPlot**.

Send To Winplot


Send to WinPlot

4. Load the printed graphic into the cutter.
5. If necessary, rotate the graphic so that its orientation on the screen matches its orientation in the cutter.
 - A. Click **Edit // Select All** to select the entire graphic.
 - B. Click  and then press **N** on your keyboard.

The "Rotate" window opens.
 - C. Place a check mark in the **Preview** box.
 - D. Click the radio buttons for the 8 degree values until the graphic's orientation matches its orientation in the cutter.
 - E. If necessary, click on the **Free** radio button and fine-tune the orientation.
 - F. Click **OK** when the graphic is properly oriented.



The graphic's orientation on the screen must match its orientation in the cutter

6. Click  to send the graphic to the cutter.

The "Output Setup Details" window opens

7. Click **Send to Cutter**.

The cutter's LCD displays "Set knife above first marker".

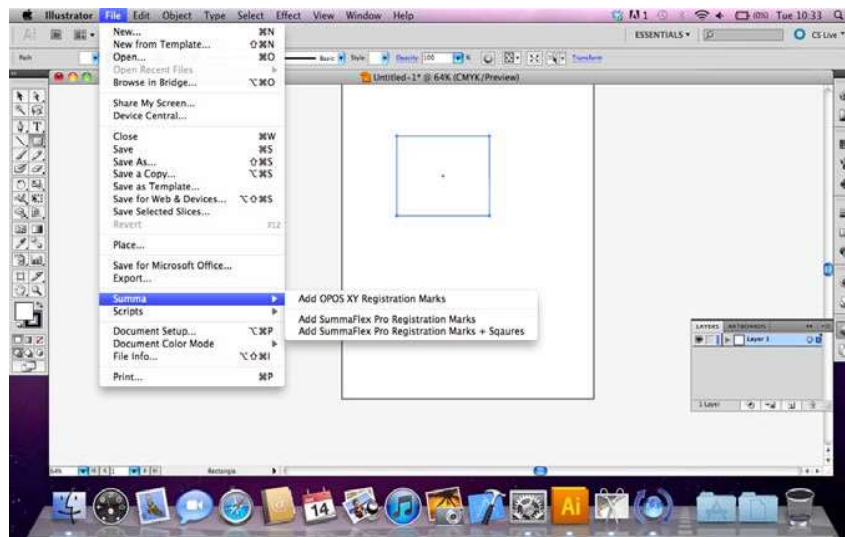
8. Using the cutter's four navigation keys, position the knife above the graphic's origin marker (the marker at the bottom right-hand corner of the graphic).
9. Press the cutter's "Enter" key.

The cutter will register the OPOS markers and then cut out the graphic.

Illustrator on Mac

There exists also a plug-in to set the markers in Illustrator for Mac. Minimum configuration is Illustrator CS4.

The Plug-in is called SummaCS4mac.aip, version 1.0.0.0 for Illustrator CS4 and CS5, for Illustrator CS6 it is called SummaCS6mac.aip.



PLUG-IN FOR ILLUSTRATOR MAC

Installation of plug-in is done manually. Copy the correct file from the DVD to the “plug-ins” directory of Adobe Illustrator CS (SummaCS4mac.aip for Illustrator CS4 and CS5 – and SummaCS6mac.aip for Illustrator CS6). Once Illustrator is started, the plug-in will be available in the File menu (see figure above).



PLUG-IN DIRECTORY FOR MAC

Creating the graphic and printing the graphic is analogue as for PC.

To cut the contour, the file has to be saved as an illustrator file version 3. Then this file has to be opened in WinPlot, the rest of the process is then again the same as explained above.

Doing an OPOS job manually

See Sections 3 in the User manuals for more detailed information about preparing a graphic for OPOS contour cutting.

Creating a graphic

1. Use your design software to create the graphic that you want to print and cut.



Graphic to be printed and cut

2. Insert OPOS registration markers around the graphic.

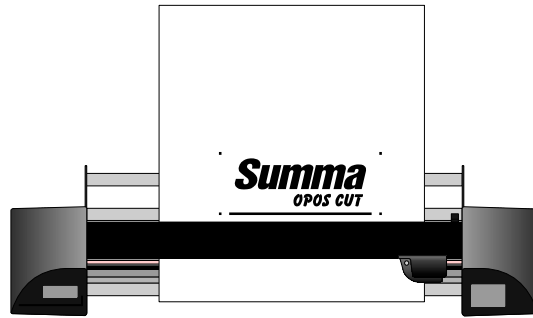


Inserting OPOS markers

- The markers must be square.
- Each of the markers' four sides should measure 3mm (not less than 1.5mm or more than 10mm).
- The markers should be dark in color (preferably black) so that they are easy to see when printed.
- The markers...
 - Should *not* be more than 1.3m apart along the X-Axis (the axis along which the media travels)
 - Should *not* be more than 1.6m apart along the Y-Axis (the axis along which the head travels)

Add additional markers if necessary. Please see the illustrations at the top of the next page.

- If imaginary lines are drawn from marker to marker around the graphic (forming a box around the graphic), it is important that no part of the graphic cross any of the lines.



Cutter axis diagram



Graphic axis diagram

Printing a graphic

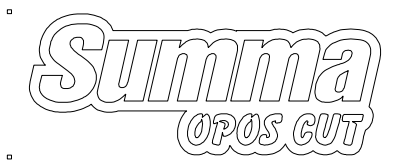
Printing a graphic

1. Make sure there is at least a 1cm (0.4in) margin beyond each of the graphic's four OPOS markers. A 2cm (0.8in) margin is preferable.
2. Leave a margin of at least 8cm (3.15in) following the print when using sheets or when cutting the print off a roll.
3. Print the graphic and its markers with a printer (scale = 100%).

Defining a cut contour

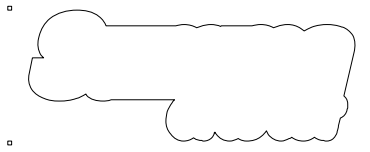
Determine whether a cut contour should be created:

- Sending the entire graphic from WinPlot to the cutter will result in every vector element in the graphic being cut.



Without a defined cut contour, all elements will be cut

- Sending a contour-only file from WinPlot to the cutter will result in only the contour being cut. This technique will result in the contour being cut around the graphic, leaving the internal elements uncut.




With a defined cut contour, only the contour will be cut

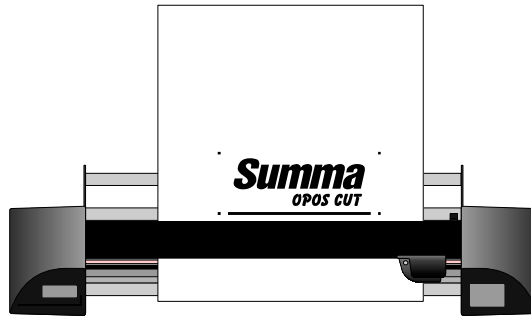
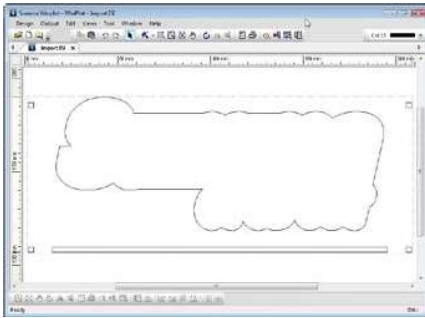
Defining a cut contour

1. Create the cut contour as a separate layer (or file) and assign it a unique color. This is the layer (or file) that will be brought into WinPlot and then sent to the cutter. The documentation supplied with your design software should provide additional instruction about creating contours.
2. Leave space between the graphic's contour and the cut contour. This buffer will allow for slight cut deviations should the material shift during cutting.


Cutting a graphic with OPOS

1. Load the printed graphic into the cutter.
2. If necessary, rotate the graphic so that its orientation on the screen matches its orientation in the cutter.
 - A. Click **Edit // Select All** to select the entire graphic.
 - B. Click  and then press **N** on your keyboard.

The "Rotate" window opens.
 - C. Place a check mark in the **Preview** box.
 - D. Click the radio buttons for the 8 degree values until the graphic's orientation matches its orientation in the cutter.
 - E. If necessary, click on the **Free** radio button and fine-tune the orientation.
 - F. Click **OK** when the graphic is properly oriented.



The graphic's orientation on the screen must match its orientation in the cutter

3. Click  to send the graphic to the cutter.

The "Output Setup Details" window opens

4. Click **Send to Cutter**.

The cutter's LCD displays "Set knife above first marker".

5. Using the cutter's four navigation keys, position the knife above the graphic's origin marker (the marker at the bottom right-hand corner of the graphic).
6. Press the cutter's "Enter" key.

The cutter will register the OPOS markers and then cut out the graphic.