

Quick Guide to MagiCut V6 Pro



Installation

MagiCut V6 is supplied on a flash drive. This is required to install and then needs to be attached to the computer when running the program.

MagiCut V6 requires

- PC running Windows 2000, XP , Vista and Windows 7 (32 and 64 bit)
- 1gb ram (2gb plus preferred)
- 100gb hard disk minimum
- 1 USB port for the FlashDrive
- 1 USB port for a Printer if attached locally
- 1 USB port or a serial Port for the Cutter
- 1024 by 768 minimum screen resolution

To install, place the flash drive in a free USB port. Open the flash drive in Explorer or My Computer and double click on the Launch.exe file. This will start the installation. Follow the prompts and MagiCut will be installed with entries in “All Programs” and an icon on the desktop (optional).

For a USB connected cutter install the cutter driver from the manufacturer’s disks. For Graphtec cutters this requires the cutter to be in GPGL mode. Serial connections can use GPGL or HPGL.

Note: Graphtecs are delivered currently in HPGL mode and will not work on USB. Change the language in the menus under Command to GPGL and set the step size to 0.025mm.

First Run

Start the program from the Desktop Icon or via All Programs – MagiCut – MagiCut 6 Professional. On first startup a choose cutter dialogue will appear, select the cutter and connection.

At any time it is possible to add and remove cutters using the “Manage Cutters” option in the file menu of MagiCut 6.

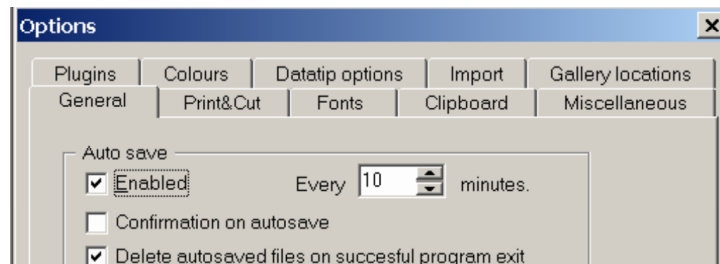
Currently TheMagicTouch supplies Graphtec CE-5000-60 cutters. These can be used either via a Serial port (Normally COM1) or via USB. Select the driver (GPGL or HPGL version as needed and set the cutter via its menus appropriately.

MagiCut 6

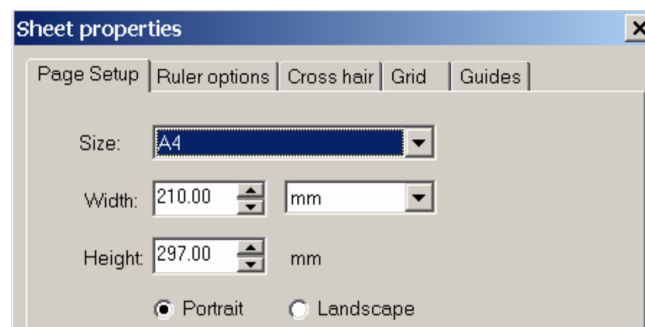
Settings

Various settings are available in the View menu. This is where the program can be customised.

View > Options item covers various program settings such as the Autosave, Backup files, Undo memory size etc.




View > Sheet properties menu covers the screen setting, page size, units etc.



Quick Text



To type some text, Open MagiCut and click on the A icon . In the toolbar that appears set the font required. Place the mouse pointer on screen click and hold the left button and drag vertically down the screen. This sets the text height. Release the mouse button and type your text. Arrow keys, backspace, delete etc. will work as a normal word processor.

Option

For an exact font size, set the text height in the box above “M” size then click once on the screen rather than dragging the mouse pointer down.

To alter already typed text drag the mouse through the typed text to highlight all the letters then change options in the toolbar. (Control-A will also select all). To alter part of a text, drag through only the letter(s) to be altered. Shift + arrow key can be used to select as well. Place cursor in the line with the mouse, use the arrow key to move the cursor and shift +arrow to select a letter or letters.

Kerning (letter spacing)

Kerning is the distance between letters. Whilst not normally altered sometimes fonts contain bad settings for particular pairs or a special effect is called for. Another reason to alter spacing is when an outline is needed.

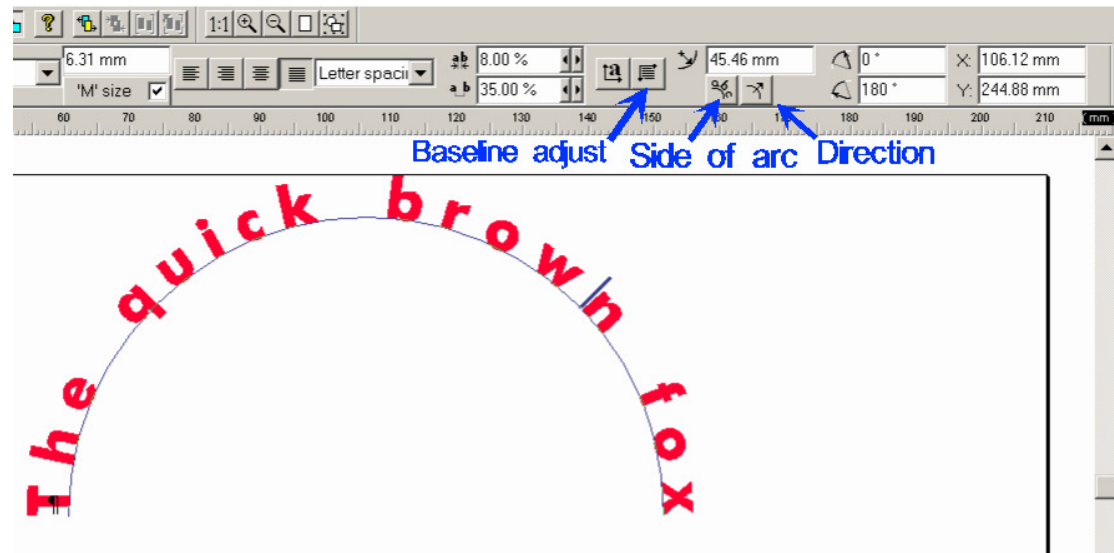
To adjust the kerning of an individual pair select the letter before the gap then use the spin control to alter the gap, for more than one gap select the letters upto the gap to be altered.




Here the W<>A and A<>V spacing will be altered.

Quick Arc Text

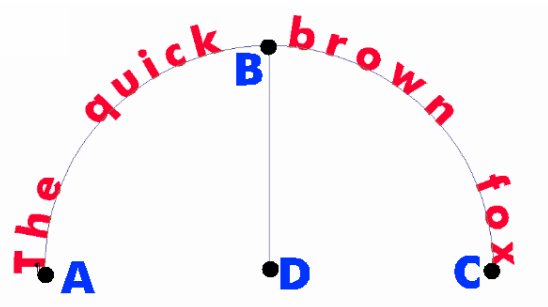
Type a line of text on the main screen, from the text menu select Put text on Arc. Set the method to fit the text, the default is Letter spacing. Options are Letter size, letter width and spacing. The Letter size option may be more useful than letter spacing.



The line will appear on a half circle. To edit the arc press baseline adjust and manoeuvre the control points with the mouse. You can place the lettering inside the arc with the side of arc button and reverse the direction with the direction one, used for the bottom of arcs.

Press  icon to adjust the arc. The points ABCD will appear and the Arc ABC, clicking on point will draw a line from the centre D to the point.

Point A and C alter the angle moving just the point, holding the shift key whilst moving A or C will move the two points in step.



With the control key held, clicking on A B or C allows rotation of the text about D.

Point B allows resizing of the arc and alters the radius as it is moved.

After resizing there will probably be a need to resize the letters, alter word spacing, change the letter spacing. These can be done from the tool bar.

Badges

These are designs with text above and below. It can be done with Arc text but matching the parts can be difficult. As MagiCut will fit text to a line the easiest way is to place text on a drawn ellipse/circle.

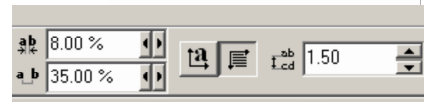
Start by drawing an ellipse from the shapes. Set its size to the badge size. Enter text mode and set the required text height. This can be altered later if needed, Set font and bring the cursor over the edge of the ellipse and click, the text cursor will attach to the ellipse.



Start typing and the top part of the text will be placed on the ellipse.

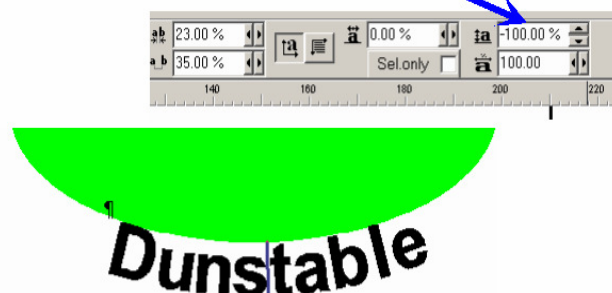


To align the text press the baseline adjust icon and move the pointers that appear at the start of the text with the mouse.



Once the top is correct, bring the mouse pointer to the start point of the bottom lettering, Hold the Control key down and click the mouse button. The cursor will sit inside the shape. Type the text then use Ctrl-A to select all the text and alter the vertical displacement to -100% . The lettering will now hang off the base of the ellipse.


Vertical displacement



It is possible to use vertical displace on the top text so all lettering is inside the ellipse. In this case you will need to alter the kerning value to space out the letters.

Cutting

Place material in cutter and initialise so it is ready to cut, set the cut pressure appropriate to the material.

With the text on screen click the cut or cut selected icon  (or use File menu – Cut all/selected)

The cut dialogue opens. For MagiCut Products (Flex, Flock etc.) the cut needs to be in mirror.

Set Mirror on - the E icon – press the Read button to discover the width of the material in the cutter. If the cut job fits then it will display correctly. If the cut is bigger than the read width a split line will appear.

Assuming the object fits click the colours/markers tab.

Here you can set the weed border and select to cut by colour or layer.

Registration marks and Panel markers should be off.

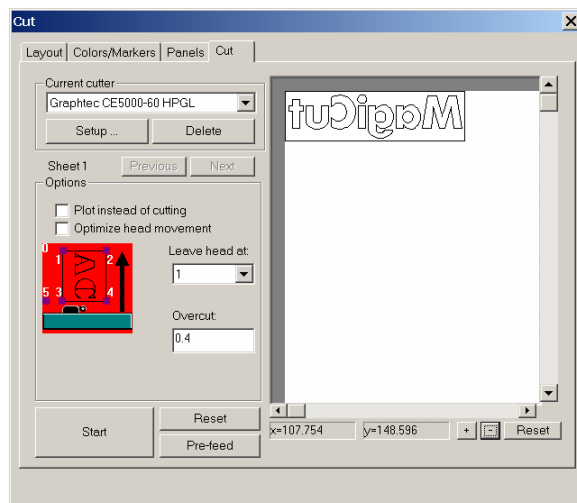
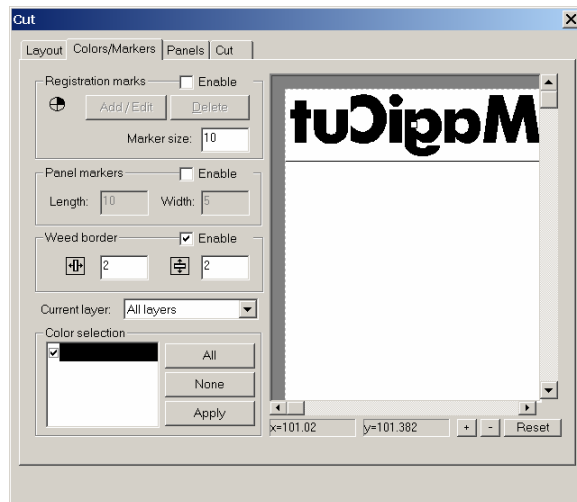
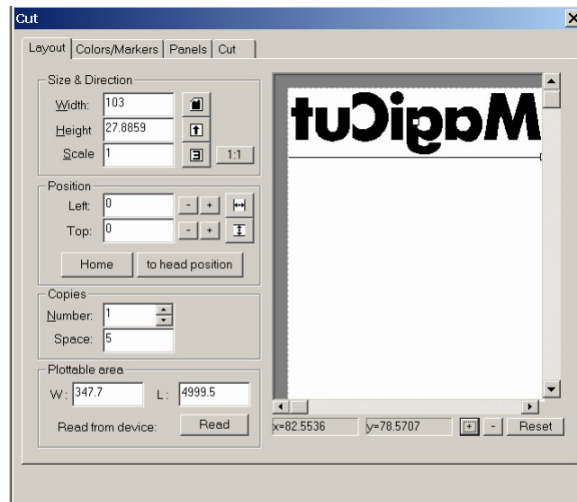
Weed border is optional, it makes it easier to weed when the cut object is only part of a sheet. For large objects it may be unnecessary.

With the settings ready click the Cut tab.

Here set the “Leave head at” to 1, (3 is for roll cutting) a small value of overcut is helpful when weeding, a value of 0.3 to 0.4mm will do.

Click start to cut.

Remove waste (weed) and press on garment.

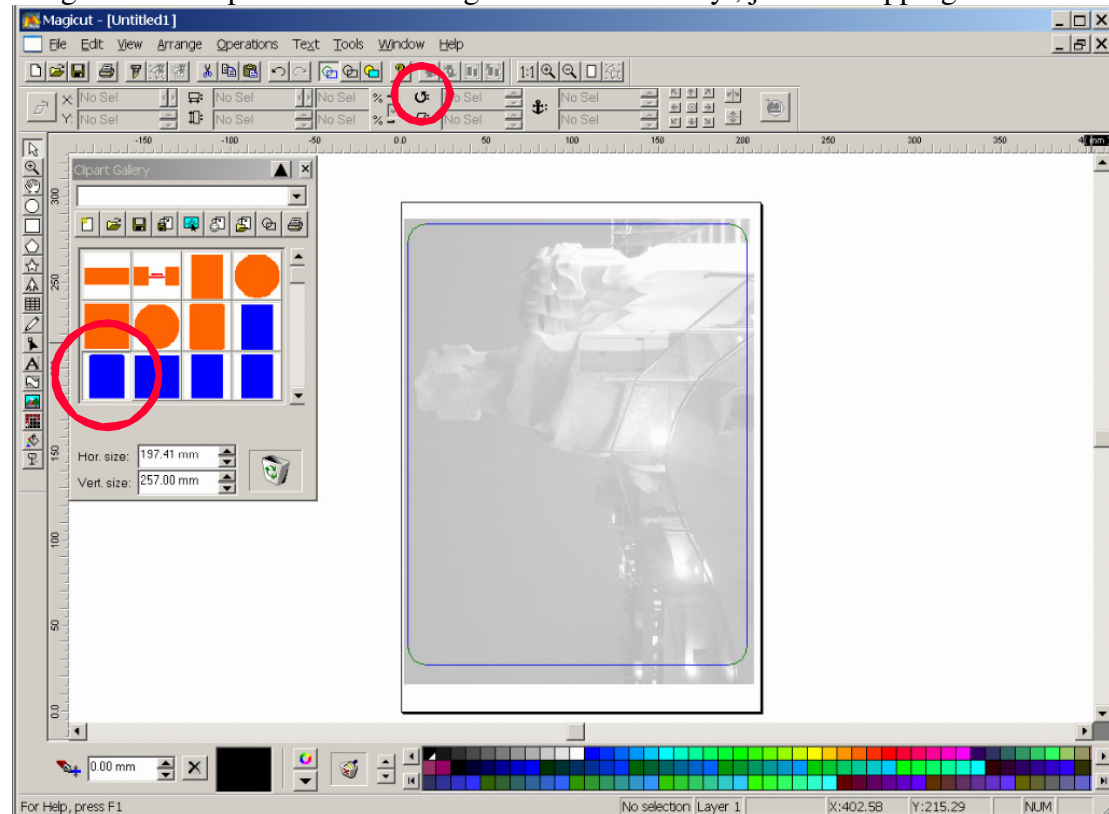



Using templates

For this example we'll create a mouse mat.

Start with a new screen. Import an image, probably a jpeg, rotate if needed then from the tools menu select Galleries, Clipart, hover the mouse over the templates (orange for CPM products, Blue for TTC) until you see the message Mouse mat, drag the mouse mat onto the screen. The Mouse mat is correctly sized for printing.

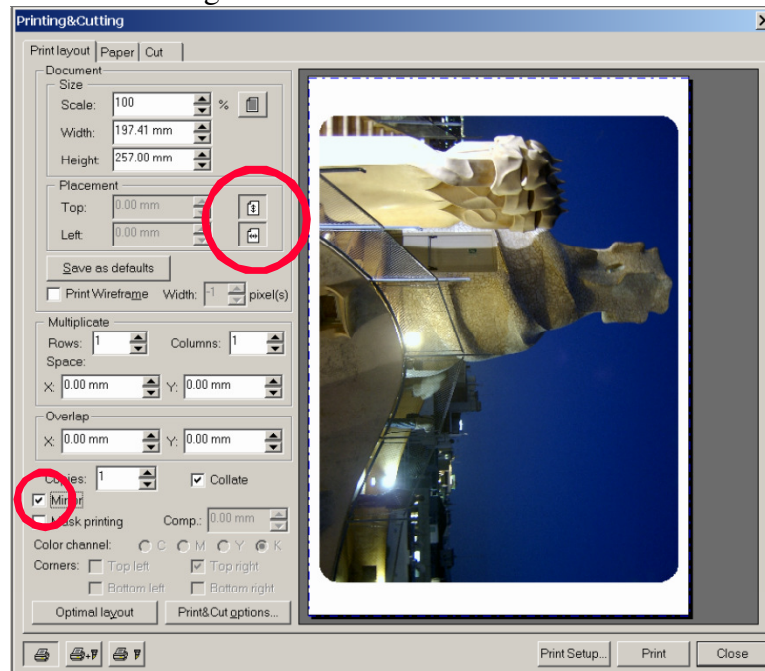
Switch the view mode to Coloured wireframe so you can see the relationship of the image to the template. Size the image so it fits correctly , just overlapping is best.



Now return to the normal view, Drag a selection box over both the Image and the template, the  Icon will light up, Click it to add the template as a clip path to the image. The Mouse mat is now ready for printing.

Printing

Make sure the image is on the page. From the file menu select Print and the Print dialogue will appear. Check the scale is 100% and not greyed out. If the button by scale is pressed then the image is resized to fit the sheet.

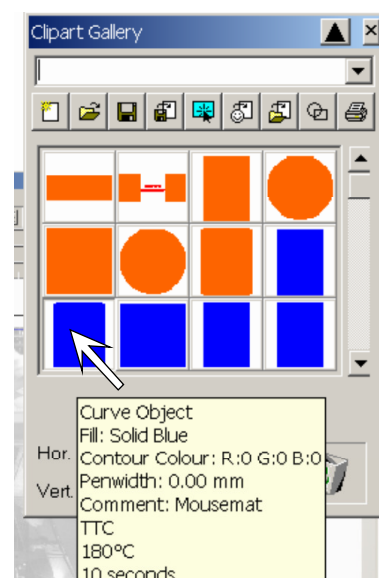


For Mouse mats and other TTC and CPM printed products the print normally needs to be mirrored. This is set in the lower left. Centre the image using the placement option. Click print setup and set the correct paper type for TTC on the printer, for example OKI printers generally use TTC3.1 A4R running as Heavy.

Print the TTC and press on the Mouse mat.

Templates are provided for many TheMagicTouch products for use with CPM and TTC. The templates when hovered over provide basic pressing instructions to help with creating the product.

Here is the extended information on the Mousemat as an example.



WoW


WoW 7.1 is a unique (and patented) method of producing coloured images on dark (and light) garments without a background and without needing to use a cutter.

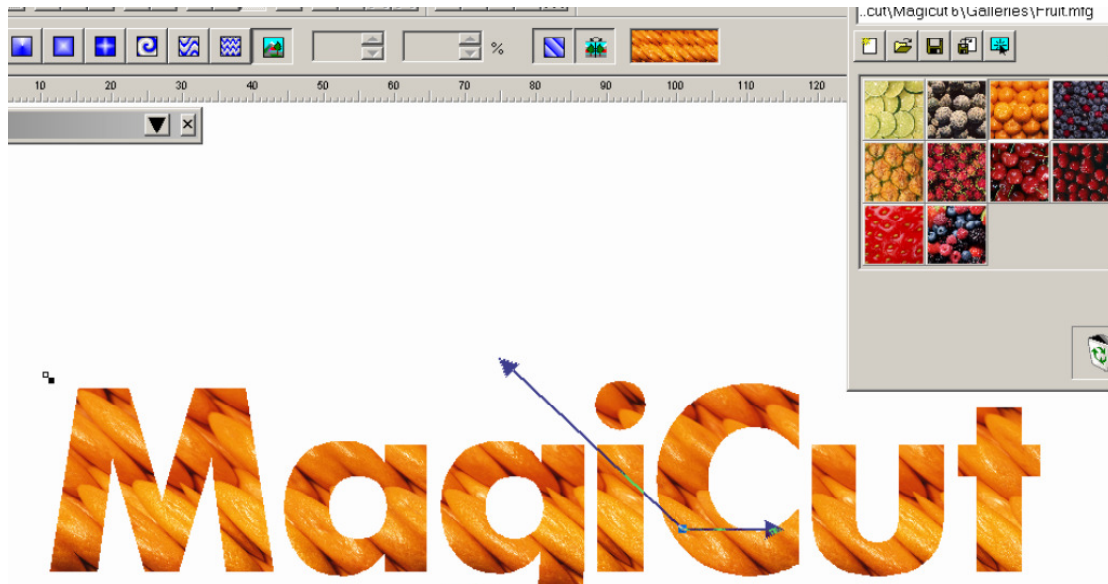
Creating patterned text for WoW 7.1

Start by typing some text then open the Fill gallery from the tools menu – gallery – Fills.



Drag the required fill from the fill gallery, a simple mouse drag will fill a single letter, to fill the entire word(s) hold the shift key down and drag. The example has the oranges dragged with the shift key then the strawberry dragged over without the shift key to fill a single letter.

The fill can be modified by using the fill mode option. Click the  icon to enter fill mode.

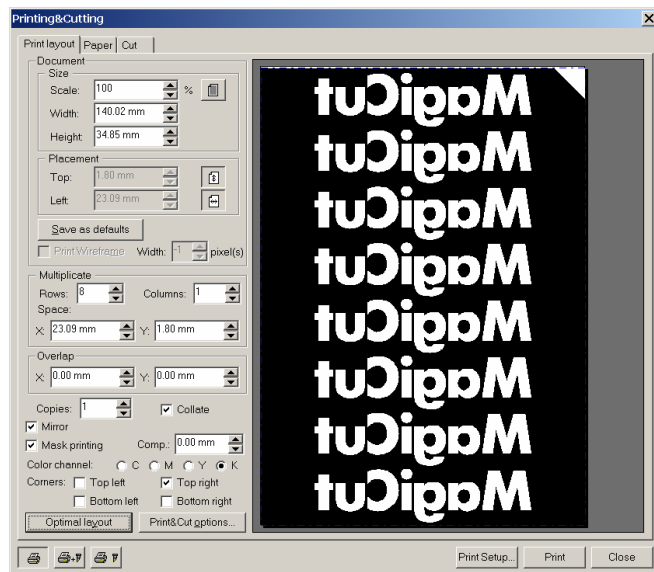


The fill tools will only work on a single fill, not a mixed fill object. So here the fill is dragged over with the shift held down, in fill mode an adjustment tool appears. The arrows can be stretched and angle altered, this changes the size and skew of the image.

Printing for WoW

From the file menu choose print. WoW requires two prints, a mask and a coloured image. The mask is printed onto plain (100gsm) paper.

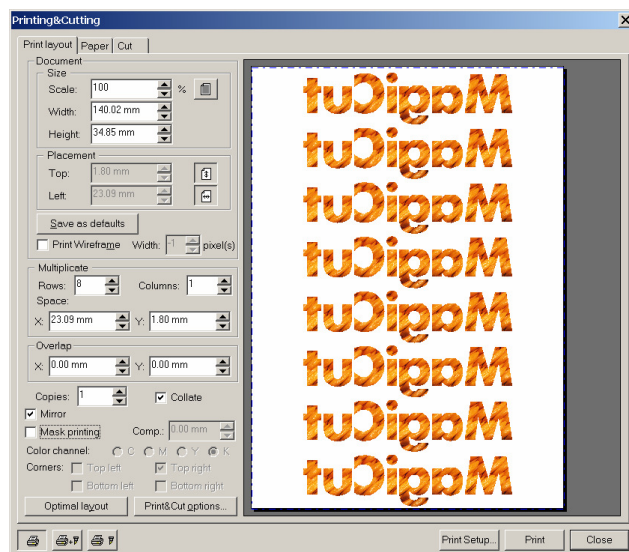
To print the mask select placement and centre the image use optimal layout in the bottom left to fit as many images on the paper as possible. Then place ticks in the Mirror and Mask boxes. The position of the corner cutout can be selected in the corner options, this cutout is to make peeling easier.



Use print setup to select the correct paper settings and print the mask.

Turn off the Mask option, leaving mirror on, Use print setup to set for the I sheet and print the I sheet

The prints are now ready for making the WoW transfer.



The same technique works with any drawn or scanned and converted shape.

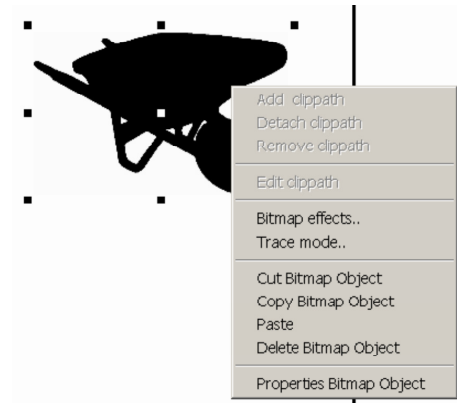
For Shapes with photographs the shape must be added as a clip path to the photograph similar to the method described in the mouse mat explanation.

Simple Tracing

MagiCut is capable of tracing a bitmap image and producing a vector output for cutting.

Import a bitmap – tif bmp jpg etc, best results from high resolution monochrome images such as TIF and BMP, jpegs tend to give scruffy edges due to the lossy compression used.

Right Click the image and select trace mode

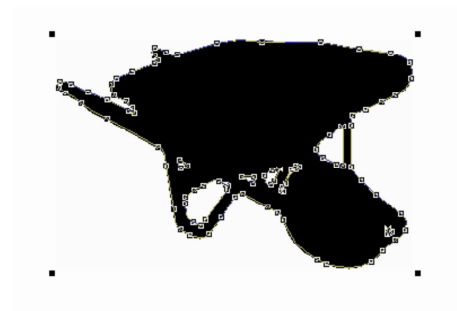


Trace toolbar

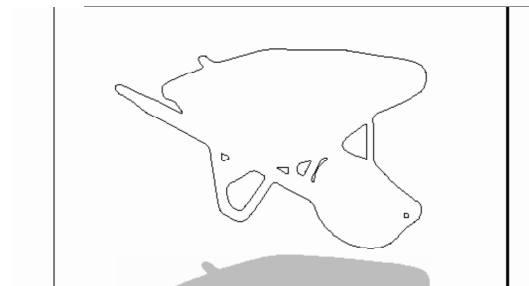


With the trace on Default settings click on the trace icon, press the Show nodes to see the trace.

Provided this is acceptable, return to the normal mode with the white arrow (Selection mode)



In wireframe you can see how the trace is. This is now a resizable and cuttable object.



Basic Print and Cut

To print then cut an object / image it needs a path round the edge with a Print&Cut Property. The edge may be put on with add clippath for images or simply selected for a vector object.

Adding a clippath to an image .

Place shape over image – Drawn shape, text, traced object etc. and with both selected click the add clippath icon.

To edit the clippath right click the object and select the edit clippath, change with the node tools for example then right click again and choose the edit clippath menu item again to put it back on the image.



With a path available, select from the tools menu “Print and Cut” this brings up the print and cut dialogue.

For a straight forward print and cut set .

Outline – cuts outside the edge, depends on Distance

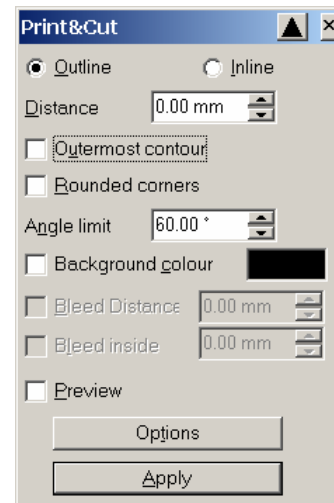
Outermost contour – will not cut any inner parts

Background colour – set on for a bleed

Bleed distance- 1mm to stop wisps of white

Bleed inside - 0.25mm can cover trace errors on jpeg edges

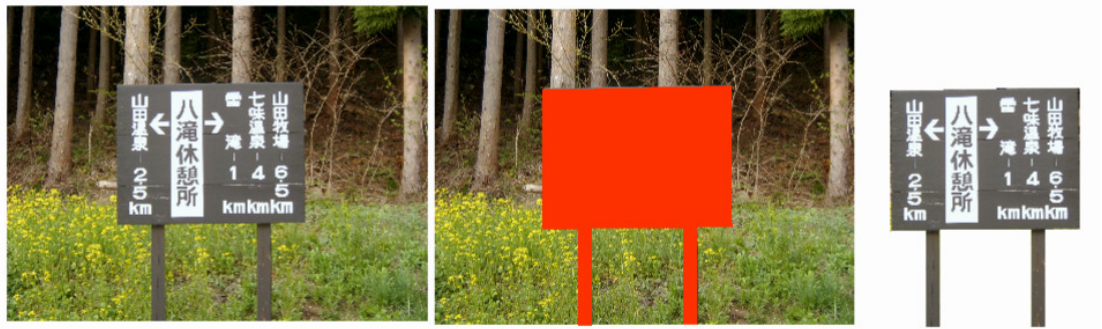
Normally Outline at 0mm unless a stepped of cut is needed. Inline can be used to cut inside the image, can be good on photographs.



With this set and a correctly sized object. Start the print options – File Print.

Various settings need to be done, including setting the marker options for the cutter, the print media type, paper margins and triggering the Print Cut mode.

Start with an Image, Add a shape and then select both to Add the clippath



This gives the shape, Now use the print and cut option from the tools menu and sett the required options –

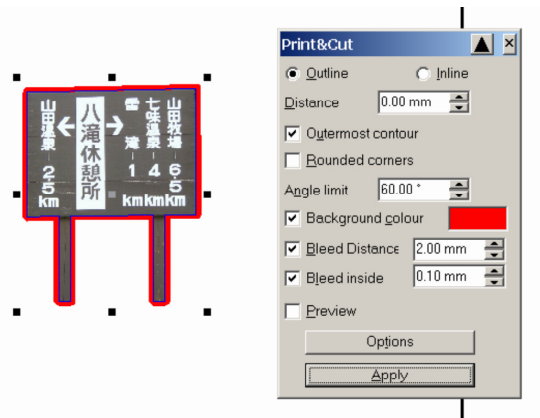
Distance 0

Outermost contour

Background colour (red to display here)

Bleed inside

And click apply



The item is now ready for print and cut

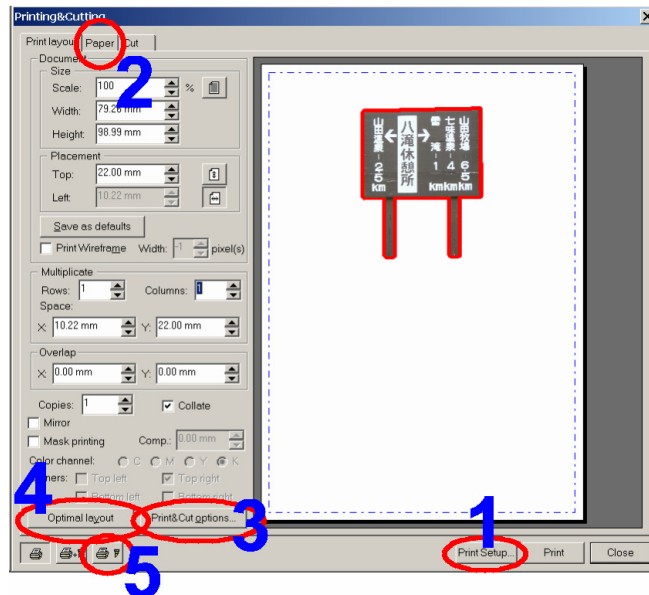
Enter print mode (File> Print)

First setup the printer (1) by clicking print setup and selecting printer and paper size and media type (OKI 5750 and OBM select OBM or Labels1)

Next setup the margins under the paper tab (2)

Then set the print and cut options (3)

Press Optimal setup to see how many Magicut can fit in the margins (4) and finally press the Print with cut icon to enable the cut option.



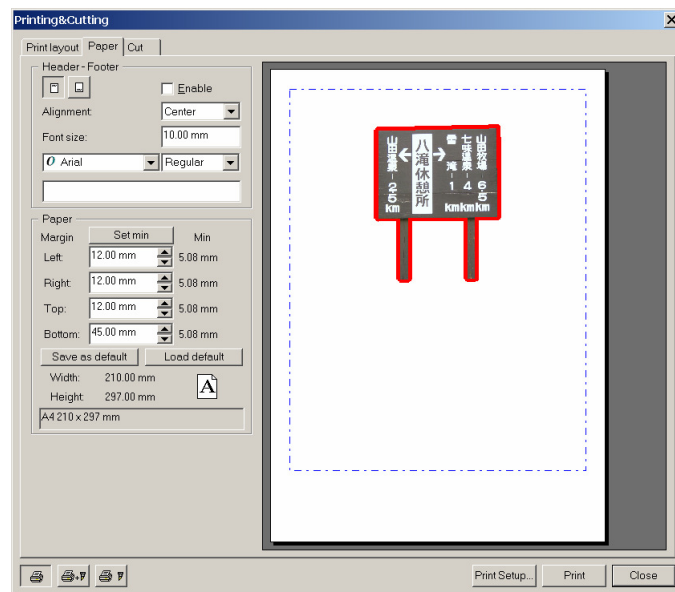
The next section describes the actual settings starting at 2 as the print setup is printer specific.

2 Paper

This sets the margins MagiCut uses to leave unprinted area for the cutter.

For a Graphtec cutter the margins when cutting without using a backing sheet are 12mm top, 12mm left and right and 45mm bottom. This gives room for the wheels and prevents the paper falling out of the cutter.

With a backing sheet all margins may be reduced to 6mm as the wheels can run on the backing.

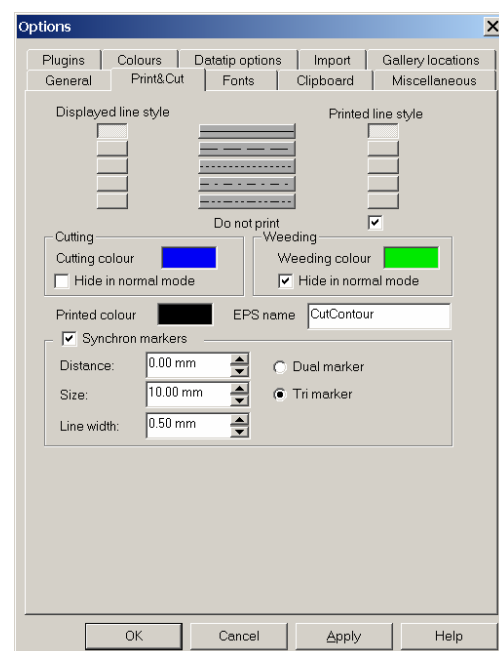


3 Print and cut options

This sets the size and thickness of the markers along with a guard distance to keep the image out of the marker area.

Suitable settings for a Graphtec are size 10mm, line width 0.5mm, the distance depends on the image, 0mm is suitable for images which do not project into the markers, a maximum of 10mm is needed for the worst shapes to prevent the optical eye picking them up

Graphtec's use a tri-marker system which needs to be on. The cutter also needs to be set correctly for print and cut

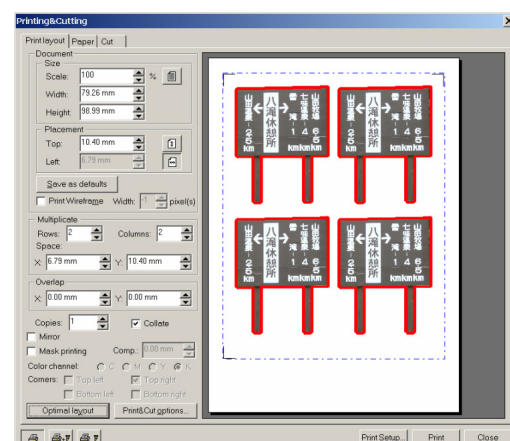


4 Optimal Layout

Press to see how many fit. This can be altered with the rows and columns and the space modified if needed

5 Press the Print with Cut icon.

Insert paper in printer and press the print icon



Cutting the printed material

Take the print and place in the cutter. In the case of the Graphtec cutter make sure the markers are correctly positioned, the righthand one as you look at the cutter is the most important and needs a gap of 2mm or so from the inside of tyre and no further forward then the cutting line.

The positioning is similar with a backing sheet except there is less need to worry about the left side interfering with the markers.

Do not forget if you print landscape to put in the cutter landscape!

The image shows paper on a backing sheet in both landscape and portrait positions. The position of the marker can be seen.

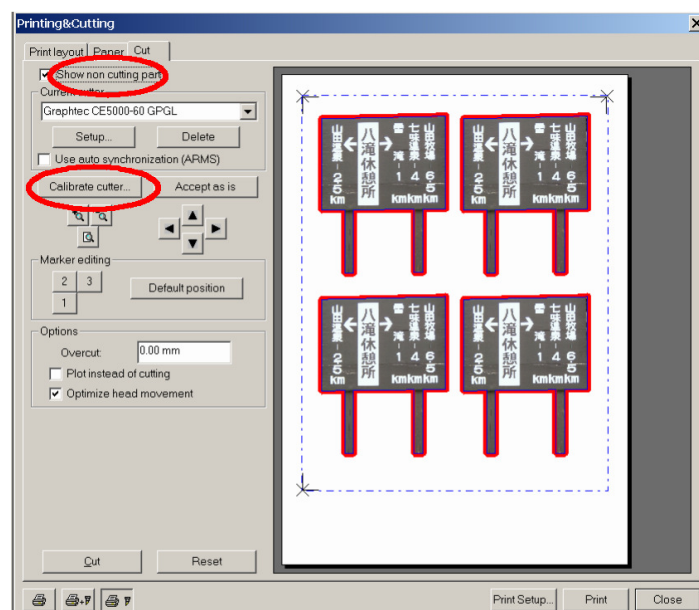
Without a backing sheet the position is the same with wheels on each edge and the markers between the wheels.



With the paper positioned click on the cut tab.

Show non cutting part allows a quick check you have got the correct lines – Clicking this turns off the fill and displays only those parts tagged as Print&Cut.

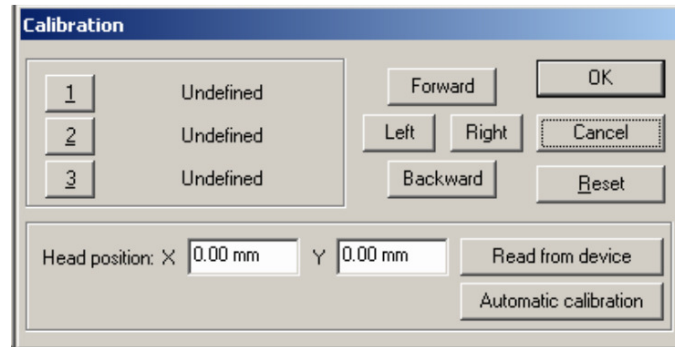
Calibrate cutter starts the marker calibration process.



Calibrate cutter

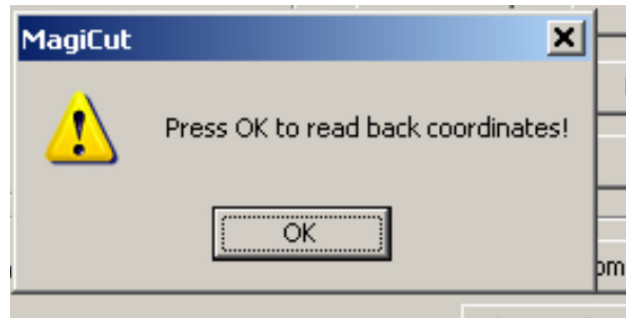
Press the Calibrate cutter button and the Calibrate dialogue appears.

Assuming the Graphtec cutter is ready – Paper loaded and initialised usually with roll 2.



Press the Automatic Calibration button, a dialog pops up on screen saying Press OK to read back Coordinates

Wait! For the cutter to measure all three points and return to the origin. Then press the OK



The three lines saying Undefined in the first image will fill in with numbers – these are the co-ordinates of the markers.

Press OK on the Calibration dialogue then press the Cut button.

Finished!