

Create, Select, Setup and Cut
or how to produce signs in 4 steps using

MagiSign

for Adobe Illustrator™



Create, Select, Setup and Cut

USER'S MANUAL

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Manuel d'utilisation NCS MagiSign
Ouvrage conçu par New Ceres Solutions,
Horizon du Stimont, 6 à B-1340 Ottignies Louvain-La-Neuve, Belgique

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Acknowledgement

**New Ceres Solutions thank you for the trust you have shown by selecting
- or by accepting to test - the NCS MagiSign plug-in.**

We welcome you amongst the users of this product and are at your disposal for any further information, or any suggestions.



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Introduction

Adobe Illustrator™ most recent versions offer a large panel of dreamfull features to signmakers, screenprinters and professionnals of the visual communication.

NCS MagiSign extends those features by offering to control sign cutting plotters directly from Adobe Illustrator 8.0 and 9.0.

Sure, without **NCS MagiSign**, you could reproduce your designs using a sign cutting plotter through a bridge software or by importing .ai or .eps files in a dedicated sign software. This supposes copy/paste or export/import processes and thus results in loss of time, multiplications of the files and frequent loss of informations as of quality.

Thanks to Adobe Illustrator™ open architecture, **NCS MagiSign** does not suffer of those limits. It appears to you as a palette at the heart of your graphic software, just as any Adobe original features. **NCS MagiSign**, the creation of signs will than no more differs of what you would do for any common job using Adobe Illustrator. All the features of this major design software are at your fingertip at any time.

NCS MagiSign doesn't require you to learn any other software than Adobe Illustrator™. And thanks again to Adobe philosophy, learn one of their software and you will be able to learn any other of the range of Adobe products effortless. At less cost than a common dedicated sign software. For more features than you could ever dream...

Licence agreement

New Ceres Solution, named hereafter NCS, do not sell in any case the rights on **NCS MagiSign**, named hereafter the Product.

On the contrary, NCS only grants the right to make use of the **NCS MagiSign** through a utilization licence granted to a physical or moral individual, named hereafter the Holder.

The connection of the protection key to a computer implies agreement by the Holder and commits him and/or his legatees to the terms of this licence, the limits of the guarantee and the recognition of rights that bind him to NCS or their legatees.

The use of the protection key will be demonstrated, should the need arise, by the presence or not of a code in its memory.

NCS grants the right to test the software to any physical or moral individual who expresses the wish, providing that this individual agrees on the limits of the guarantee described here below, as well as the licence conditions expressed here below.

The product evaluation requires no protection key, but limits the reproduction capacities of the Product.

Any individual who disposes of a copy of **NCS MagiSign** and does not agree with the terms of this licence or the guarantee limits is compelled to return the full set or any part in his possession to NCS and this, as soon as possible.

Description of the licence

1. Licence Agreement

As licence contractors, NCS grants to the Holder — against an indemnity — a non-exclusive right to use the **NCS MagiSign**, in whole or in part, on the computer of his choice as long as the said Holder expresses his agreement with the terms of this licence and providing he has paid a subscription right in proper form. NCS reserves all rights which are not explicitly granted herein.

2. Ownership of the software

The Holder of a licence has ownership over the computer supports on which the **NCS MagiSign** and the manual are delivered, on the strict understanding that NCS retains the ownership of the titles and all the copies made of the Product, whichever the support on which they have been executed.

The licence constitutes in no case a sale of the original software or a copy of it. The techniques, algorithms and processes used for the protection of **NCS MagiSign** are partially owned by Aladdin Knowledge Systems Ltd.

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3. Restriction related to the copy

The software, the manual and the graphic material which accompanies the **NCS MagiSign** are part of the Product and subject to the copyright legislation.

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The Holder may not modify, adapt, translate, decompile, take apart or create products derived from the Product. The Holder may not modify, adapt, translate or create products derived from

this manual and/or the graphic material, without the prior written agreement of NCS.

5. Restrictions related to the transfer

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In no case can the Holder of a licence transfer, assign, rent out, sell or put at disposal of a third party, in any form or by any means, all or part of the Product.

The licence cannot be assigned to a third party without the prior written agreement of NCS

6. Beginning, duration and expiration of the licence

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In a first step the licence is granted provisionally for a period of ten hour of driving a peripheral. The utilization time of each key is retranscribed in a coded way inside it. In most of the cases the licence becomes effective until its term as the Holder has sent back his registration card duly completed to the adress of NCS.

In some case, according to the distribution network, an additional stage is imposed on the Holder allowing the Holder to claim for an indemnity.

In any other case, the expiration of the licence compiles the Holder to destroy the written material and all the copies of the software, including modified copies, and return, at his expense, the protection key.

7. Update

NCS retains the right to create, modify and update the Product and each of its modules without right for the Holder to claim any right on those creations, modifications or updates.

NCS is entitled to propose those products to the Holder, and request an indemnity for this service.

8. Miscellaneous

NCS has its registered office in Belgium, rue Horizon du Stimont, 6 at B-1340 Ottignies Louvain-la-Neuve.

The Holder of a licence elects domicile in Belgium with regard to his relation with NCS. The licence is under the protection of the belgian legislation, to the benefit of NCS and their legatees.

Limits of guarantee

The exclusion of this guarantee is not authorised in certain countries. This exclusion may therefore not be applicable in your case.

With regard to the rights that follow from the guarantee, they may vary from country to country.

Neither New Ceres Solutions, neither Apple Computer Inc, neither Adobe offers a guarantee, implicit or explicit, with regard to the Product and the accompanying documents (including the user's instructions).

The Product is delivered as it is, without guarantee of any kind. NCS does not guarantee nor make any commitment with regard to the utilization or the results of utilization of this collection. The Holder takes it upon himself the responsibility of this utilization and the damages that might follow. Neither NCS nor the retailers or distributors of this product can be requested to assume the charges related to the repair of damages or the correction to this product.

Install NCS MagiSign

Setup the plotter

Before to install the software, we recommend you to setup your cutting plotter :

1. Configure your plotter following the instructions provided in its manual. Mainly care to autorise it to receive external command send from the computer.
2. Choose, if ever, the appropriate language to drive it. If any hesitation at this purpose, contact your reseller. He would be able to recommend you the best language for your job.
3. Note, if ever, the axis system. When you have the choice, the most useful axis system for signmaking is to place the origin at the bottom left of the foil relative to its length.
4. Select the serial interface as the one to be used for communication between your plotter and your PowerMacintosh. This is sometimes to be done by moving dip switch connectors, sometimes by selecting the right interface through the menus of the plotter LCD. Smarter cutting plotters don't require this setup and recognise on the fly the port from which data are arriving. Read carefully the documentation of your plotter if you ignore how to proceed.
5. Note on a white page the configuration (baudrate, parity, data bits,...) of the serial port of your plotter.

This information is fundamental, but not always easy to find in the menu, switch and/or manual of the plotters. In any doubt subsit, ask this info to your reseller and be sure developping NCS MagiSign, we carefully setup the default serial configuration for each model of plotters to simplify your job so it would be plug-and-play if nobody has modified the plotter settings from its assembly.

Note : A list of the compatible cutting plotters is provided at the end of this manual. Don't hesitate to contact us if your model is not listed.

Plug the cable

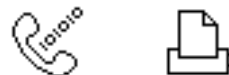
Many disfunctions related to the use of a sign cutting plotters with PowerMacintosh are related to a misunderstanding of the right way to link them together.

A resume of the situation will hopefully clarify this situation.

Serial, parallel or USB cable ?



From **1984**, all the Macintosh and PowerMacintosh models delivered by Apple **until the G3 beige** offer two **Serial connectors**, easily recognised by a "Modem" and "Printer" icon :



Exceptions are :

- the Powerbooks models before G3 ones.



Those models have only one serial connector. This one is identified by a icon showing a combination of the modem and the printer icon.



- the 5xxx and 6xxx PowerMacintosh/Performa



Despite those models have has 2 serial ports, only the printer port is active while an internal modem is installed. We are amongst those who regret Apple has only clearly advice it on the latest models of those series.

In **1998**, Apple decided to replace both serial connectors by **Universal Serial Bus** (USB) ones.



Amongst the advantage of this technology, we would note one standardized plug and port combination replaces all the different kinds of serial and parallel port connectors.



The first Apple computers to use this technology were the PowerMac G3 Blue and Ice and the iMacs.

All other models produced by Apple from than use this technology.



Note : As strange as it could be for a Wintel-based customer, the **Parallel** port is thus all excepted commonly used in the Macintosh community !

A. How to connect a serial plotter to a serial PowerMacintosh

1. Check which serial port is available on your PowerMacintosh. By default, the modem port appears to be the easiest to use, but don't forget our advice concerning PowerMacintosh 5xxx and 6xxx with build-in modem and concerning Powerbooks.

2. Disable any Apple network protocols send to the port you want to use for the plotter. Otherwise, your plotter would receive a flow of network instructions from MacOS, with unpredictable results. To proceed, first select "Apple menu"->"Control Panel" >"AppleTalk" and check the port used by AppleTalk. If it uses the port you wanted to use, disable Appletalk through the "Chooser" in the Apple menu.

3. Check if no other software will interfere with the serial communication (fax, print spooler, etc). Some printers and fax machines use hidden spoolers so that the port used by their software will be appear as busy anytime you will try to plot from **NCS MagiSign**. If ever, disable those software or choose another serial port.

If no serial port is available, you could add a **serial port expansion extension card** in your computer. We recommend at this purpose the Keyspan SX Pro card.



To install it, just proceed as described in the documentation of the product and mainly don't forget to install the appropriate driver after checking the latest version.

Note : a recent release of the Keyspan drivers for the SX Pro expansion card is purposed inside the "USB adapters drivers" folder of the "NCS MagiSign CD". To install it, double-click on the icon of its installer and follow the instructions. Meanwhile, if ever you have access to the web, we would recommend you to check which is the most recent version purposed on the Keyspan website, as this product is updated on regular basis.

4. Check the cable you intend to use to link the plotter to the PowerMacintosh.

- Are the connectors compatible with your configuration ?
- Are you sure the internal wiring of this cable is compatible with the plotter to be linked ? It's a common error to try to use an Apple modem or Apple printer cable to connect a plotter. All the serial cables for Macintosh look similar, but their internal scheme varies from one plotter to the other ; the use of an unsuitable cable may disrupt the data communication between your plotter and the computer, even well damages your equipment. So never connect a cable without to be sure it's the right one for your plotter !

Note : New Ceres Solutions keep all model of cable in stock so we can deliver you at any time the right serial cable to be used between your

PowerMacintosh and any model of serial cutter compatible with **NCS MagiSign** in length of 5 or 10 meters. Don't hesitate to contact our closest distributor for more informations at this purpose.

5. Shut down your PowerMacintosh and your plotter.

6. Connect the cylindrical end, also called "Mini-Din 8", of your serial cable to the choosen connector of your PowerMacintosh.

7. Connect the other end of your cable on the serial interface of your plotter.

8. Restart both devices.

B. How to connect a serial plotter to an iMac, a G3 or a G4

The majority of the sign cutting plotters available on the market does not purpose any USB interface. Despite of this, solutions exists to connect any model compatible with **NCS MagiSign** to an iMac, a G3 or a G4.



Our favorite one is to use a Keyspan **USB Twin Serial Adapter** (see www.keyspan.com). As an external solution, you just have to connect it anywhere on one of the USB connector of your computer or of a USB hub connected to this one and to install its driver after checking you have the latest version of this one on the Keyspan website.

For G3 and G4, you could prefer to add a **serial port expansion extension card** in your computer. We recommend at this purpose the Keyspan SX Pro card (see figure above about serial PowerMacintoshes). To install it, just proceed as described in the documentation of the product and mainly don't forget to install the appropriate driver after checking the latest version of this one on your provider website.

Note : a recent release of the Keyspan drivers for the USB Twin Serial Adapter, the older USB Serial Adapter and the SX Pro expansion card are purposed inside the "USB adapters drivers" folder

of our “NCS MagiSign CD”. To install it, double-click on the icon of its installer and follow the instructions. Meanwhile, if ever you have access to the web, we would recommend you to check which is the most recent version purposed on the Keyspan website, as this product is updated on regular basis.

Both solutions described above adds true serial port to your USB-based computer, so that the installation of the plotter will from here be similar to the installation of a plotter on a serial PowerMacintosh. Let us invite you to read above the paragraph untitled “**A. To connect a plotter to a PowerMacintosh**” to continue the installation.

Note : As uncommon it could appear, we have successfully installed and used a sign cutting plotter connected to the free connector of an iMac keyboard.

At the opposite, we recommend to avoid any solution based on Parallel adapters, as parallel communications is not a common way to drive a device on MacOS. To avoid any waste of time, please note we will not deliver any support of any kind about this kind of products.

C. How to connect an USB plotter to an iMac, a G3 or a G4

In practice, at the moment we are writing those lines, only Summa Inc purposes an USB interface on its SummaCut range of cutting plotter.

This one is delivered with a CD which contains the drivers required to use it from a USB based PowerMacintosh.

1. Install first the SummaCut USB driver on your computer through the Installer available on the SummaCut CD-Rom.

The SummaCut pack includes a standard 5 meters ((about 15') USB peripheral cable. This type of cable is the one you need for USB connection.

2. Connect the A-male connector of the USB cable into one of the USB Hub of your computer or of any other USB hub linked to this one.

Note : As uncommon it could appear, we have successfully installed and used a sign cutting plotter connected to the free connector of an iMac keyboard.

3. Connect the B-male connector of the USB cable into the plotter USB one.

Note : if ever you need to connect your plotter over 5 meters from your computer, you could create a chain of until 5 cables linked through maximum 4 “Hub”. A more convenient solution is what is called an "Active Extension Cable". This is basically a 5 meter cable with a built in 1-port hub. You can chain four of these plus a single 5 meter USB peripheral cable to give you the 25 meter maximum reach.

4. Restart your computer.

Setup the memory

The setup of the memory is one of the most important step of the **NCS MagiSign** installation. To avoid any memory conflict, we first recommend you strongly to **disable the virtual memory** :

1. Select “Apple Menu->Control panel->Memory”
2. Disable the virtual memory
3. Restart the computer if any change.

As a plug-in, **NCS MagiSign** loads himself in the Adobe Illustrator memory while this software is launched. This supposes enough memory is allocated to add our own features to Adobe original ones. In other words, **Adobe Illustrator will probably crash at a moment or another if you don't care** to increase the memory it will use each time you will load it. Our experience is that 10 mb more that the standard partition required by Adobe Illustrator is a minimum to use **NCS MagiSign** with common file. But never hesitate to allocate more memory to your design software : it loves it.

4. Select “Apple menu->About this computer”
5. If using MacOS 9, note the largest unused memory block. For other Mac OS version, note the amount of memory available
6. Look at the Adobe Illustrator application icon and select it by a single click.

NOTE : If you click twice, Adobe Illustrator will load itself in the memory. Quit as soon as possible and restart again at 6.

7. Select “File->Get info” from the Finder.
- A dialog would appears.

8. Check the type of file you selected. If the “Type” is application, it’s alright. If it’s “alias”, select “File->Select original” from the Finder. If it’s “Folder”, you have probably select the icon of the Adobe Illustrator folder instead of the Adobe Illustrator application. In this case, open the folder by double-click, look at the Adobe Illustrator application, select its icon and redo the point 7.

NOTE : If you have selected another icon than the one of the application, no information regarding the memory will appear at the bottom of the window. In this case, start the procedure again, applying it to the software icon.

Following the version of MacOS installed, you would see some memory informations at the bottom of the dialog or in a hidden part of the same dialog revealed through a pop-up menu at the top of the dialog.

9. Replace the content of the most bottom field by the value of your choice. The ideal depends of the version of Adobe Illustrator you are using. For version 8.0.1, it would be between 30.000 Ko and the value of the available memory reduced of around 10 mb (to keep free for the systems and some utilities). For version 9.0, it would be between 56.000 Ko and the same value.

Install the plug-in

1. Introduce the **NCS MagiSign** CD
2. Open the folder corresponding to the language of your choice.
3. Drag the **NCS MagiSign** plug-in to copy it inside the “Plug-ins” folder of Adobe Illustrator. This folder would be situated in the same folder that the Adobe Illustrator application. It does not matter to place it inside a subfolder of this folder.

About the demo version

The demo version allows nearly the same that the official one, with the main restriction it does not allow to reproduce more than 15 paths. By the way, you may test nearly any of the **NCS MagiSign** features, but not really produce with it. Once you will be convinced **NCS MagiSign** is the solution for your needs and will have bought the official pack, all you will have to do is to install the protection key AND to replace the demo version by the official one. If, meanwhile you are sure you have installed the official version, you continue to see the demo alert while you use it, read further how to install the protection key.

Install the protection key

Meanwhile the demo version of **NCS MagiSign** does not require any protection key, the official one can only be used while a dedicated Microguard key is attached to your computer. So you will be able to make as many back-up copies or install **NCS MagiSign** on as many computers as they wish. However, you will only be able to run it on the computer which has the MicroGuard attached. This is for us a guarantee of revenues and thus for you a guarantee of continuity of the development of **NCS MagiSign**.

While no dongle is installed or found, the **NCS MagiSign** reacts as a demo version or... crashes your computer.

ADB or USB version ?

Two kinds of protection key are available for NCS MagiSign :

- The **ADB** one is to be used on all the oldest PowerMacintosh models, from the first ones (6100/7100/8100 series) until the Blue and Ice G3. On all of them, Apple connected the mouse and the Keyboard through a proprietary bus, called Apple Desktop Bus (ADB) and symbolised by the following icon.



- At the opposite, the **USB model** is to be used on all the most recent Apple PowerMacintosh models, from the G3 Blue and Ice until the latest models of G4. On all of those models, you would find one or two connectors identified by the following symbol.



Note : the PowerMac G3 Blue and Ice provides both ADB and USB connectors. Both protection key may thus be used on this model, despite the USB model would allow you easier upgrade on further Apple models of computer.

Install the ADB protection key



1. Read carefully the terms of the licence before to connect the protection key.

Though Apple advises not to connect ADB devices with power on, some customers will undoubtedly do so anyway. MicroGuard Plus requires no system extensions or device drivers. It incorporates protection for users who connect and disconnect under power. In addition, your key will be recognized even if it is connected with power on.

Although MicroGuard Plus can be connected while the computer is on, we recommend that you follow the Apple guidelines and turn the computer off before connecting to not damage any other ADB device !

2. Turn off your computer.

3. Locate an ADB port on your computer. If none is free, unplug one of the attached devices (e.g., mouse or keyboard). Insert the MicroGuard Plus ADB connector into the port with the ADB icon face up. If necessary, re-attach the removed device to the other end of the MicroGuard Plus. It does not matter if it is between the computer and the ADB keyboard cable, between the keyboard and the mouse or elsewhere on the ADB chain. The power consumption of fifteen MicroGuard Plus keys is less than the Apple maximum for a single ADB device. MicroGuard Plus communications use 32-Bit Op-codes and multiple registers. Thus, MicroGuard Plus can be successfully daisy-chained together with 15 ADB devices including other software protection keys.

Note :

Supposing you change of computer, you could use the ADB Microguard dongle on USB base PowerMacintosh through an USB-to-ADB adapter like the Griffin Technology iMate. We successfully proceeded by this way with this product but don't forget we could also provide you an USB protection key easier to install on those models ! Just call your reseller about the condition of key exchange.

Install the USB protection key



1. Read carefully the terms of the licence before to connect the protection key.

2. Take a look on the **NCS MagiSign** CD. Open the folder untitled "USB adapters drivers".

3. Open than the "MicroGuard" folder.

4. Drag the "USBMicroguardDriver" file onto your "System Folder" icon to copy it inside the "Extension" folder of your computer.



Without this driver, the dongle would not be recognised on the USB chain and **NCS MagiSign** would work in demo mode !

5. Shut down your computer and connect the protection key on the USB chain. It does not matter where you connect it on the USB bus. It may be directly attached to a computer USB port, but also beplaced on one side of the keyboard as anywhere on the USB bus, through any hub, as far as you respect the USB rules of power and don't exceed the 128 devices limits.

Note :

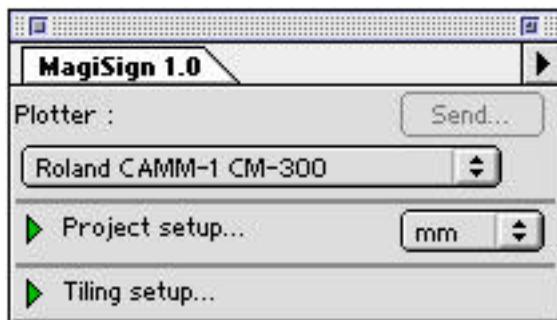
- In order for the USB keys to work correctly you can use the first models of iMac only if they have been updated with the iMac Update 1.0. This is a system update provided by Apple for iMac users. iMac Update 1.0 has many improvements mostly regarding USB devices. This update is not required for Mac OS 8.5 and Mac OS 9.0 customer nor for other USB PowerMacintosh produced by Apple from than.

- You could also use the USB Microguard dongle on PCI base PowerMacintosh with a USB card and drivers from the Mac OS DDK. We would recommend you to not proceed by this manner as we could provide you an ADB protection key easier to install !

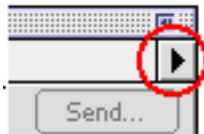
Setup NCS MagiSign

1. Start your computer
2. Launch Adobe Illustrator.

During the startup process, you would see **NCS MagiSign** loaded in the list of the plug-in. Once Adobe Illustrator loaded, the **NCS MagiSign** palette will appear at the center of the display.



3. Press the mouse on the arrow icon at the top right corner of the palette.



A list of plotter series appears.

4. Select the plotter group corresponding to your cutting plotter (see list in annexe).

As soon as you will have select the plotter group of your choice, **NCS MagiSign** will prompt you to setup the serial port with which it will have to communicate.



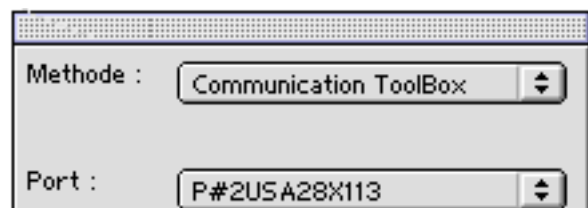
MacOS defined various processes to accede to a serial port. We purpose bot the “Classic” and the “Communication Toolbox” methods.

“Classic” refers to the oldest Apple implementation of the serial communication. It is compatible with all the Macintosh and PowerMacintosh delivered

with only “Printer port” and “Modem port”.

“Communication Toolbox” refers to a more recent technology purposed by Apple to drive serial as other kinds of devices. This second method establishes a list of all the Communication Toolbox compatible devices connected to your PowerMacintosh, including serial expansion card, USB-to-Serial adapters, internal modems, etc.

For example, the ports of a Keyspan adapter or a of a Keyspan expansion card will only be referenced using the second method. There will than be untitled as “Printer port USB” for the connector 1 and as an ID like “P#1USA28Xyyxx” for other connectors.



The same applies for the SummaCut USB devices : the “USB Summa Cutter” port appears listed in the “Port” menu only throught the “Communication Toolbox” method.

So you understand why this latest method is our favorite one :

5. Select a method.
6. Select the port to which you have connect the serial or USB cable from your plotter to your computer.

In the “Plotter setup” section above, we asked you to write the serial setup of your device. It’s now time to use this note...

7. Match each parameters of the dialog with those you noted on your device.

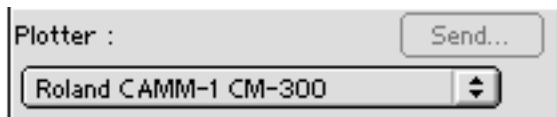
Note : by default, **NCS MagiSign** uses the manufactory settings for all devices. You would only change a value if anybody had change this one inside your plotter. The rule is that the plotter and the computer must always use the same setup for the baudrate, the parity, the data bit and the stop bit. The handshake must be the same on the computer and the plotter too, BUT depends of the cable used. Mainly you would not care about if you use the right cable for your plotter.

8. Validate your setup by one click on the “OK” button.

The setup of your choice will be saved in the “Adobe Illustrator Prefs” file. You would not have to repeat this operations anymore excepted if you change of plotters.

The first plotter selected in the current group of plotter could not be your model :

9. Choose the name of your plotter in the “Plotter” menu.



NCS MagiSign prompt you to confirm the serial setup.

9. Check the serial setup.

10. Validate your choice.

The name of your plotter replaces of the previous one. Some parameters like the default size of a tile are updated. Mainly, **NCS MagiSign** adaptes some internal mechanism.

You are ready for your first job with **NCS MagiSign...**

Produce signs

Step 1 : create

NCS MagiSign appears at the heart of Adobe Illustrator, just as any Adobe original features.

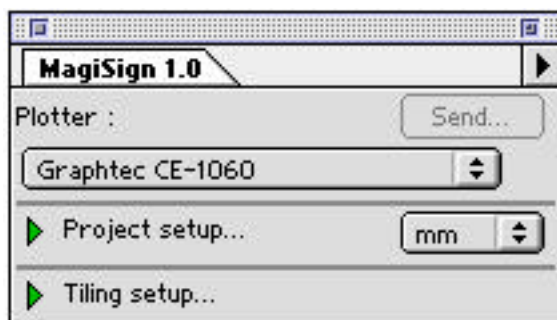
By the way, the creation of signs will not differ of what you would do for any common job within Adobe Illustrator. All the features of this software are at your fingertips at any time. You don't have to learn any other software.

To lead you in the secret of our plug-in, we purpose you to use our own logo. But sure, you could use any of your own creations or of the huge of vector-based cliparts available at Adobe Illustrator format on the market.

Insert **NCS MagiSign** CD in your computer and open the file "NCSlogo" from the "Exercices" folder.

Step 2 : select

NCS MagiSign is developped as a common palette of Adobe Illustrator.



You can show or hide it, move or group it with any other palette of your design software.

1. Click on the "close box" at the top left of the palette.



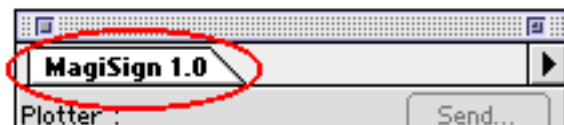
It disappears.

2. Activate the "Window" menu of Adobe Illustrator and select "**Show NCS MagiSign**".

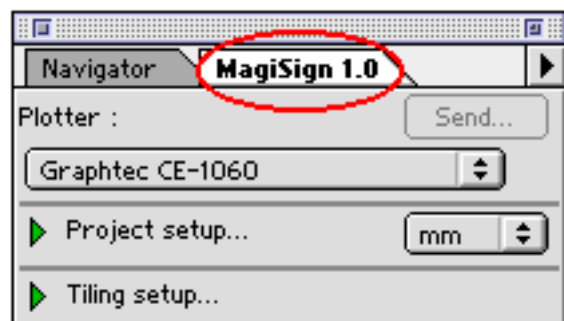
It appears back.



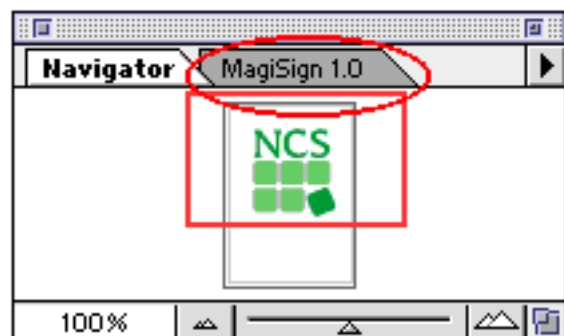
3. Press the mouse on the title of the palette and drag it onto the title of the "Navigator" palette. Release the mouse button.



The palette appears now mixed with the Adobe Navigator one :



4. Click on the title of the "Navigator" palette. The **NCS MagiSign** goes from front to background.



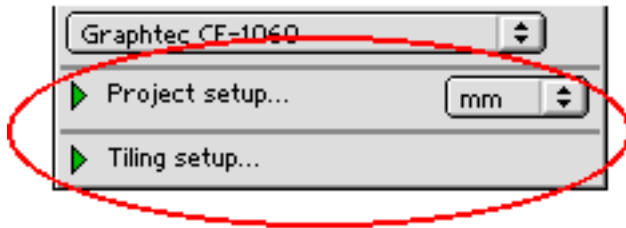
5. Click on the title of the "**NCS MagiSign**" palette. The **NCS MagiSign** come back to front.

The **NCS MagiSign** goes from front to background.

As you see, while developping **NCS MagiSign**, we did our best to keep free your workarea.

The same principle lead us to divide our plug-in in 5 managers. Two are always at your fingertip while you prepare your artwork, the project manager and the tile manager.

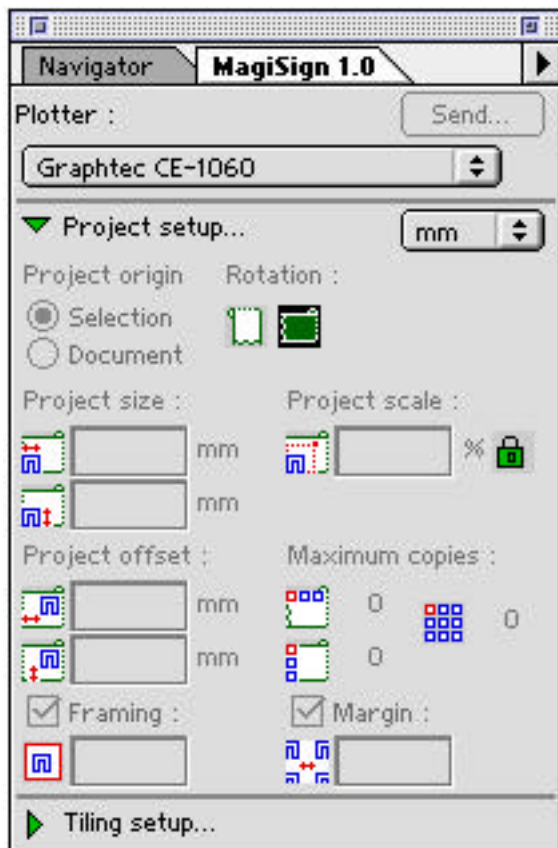
When the **NCS MagiSign** palette is in front of you for the first time, you see only the title of these two managers.



6. Click on the arrow placed before the title of the “Project setup” manager.

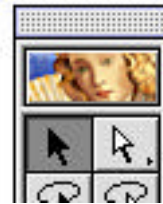


The Project manager develops its informations.



The fields are greyed as nothing is currently selected.

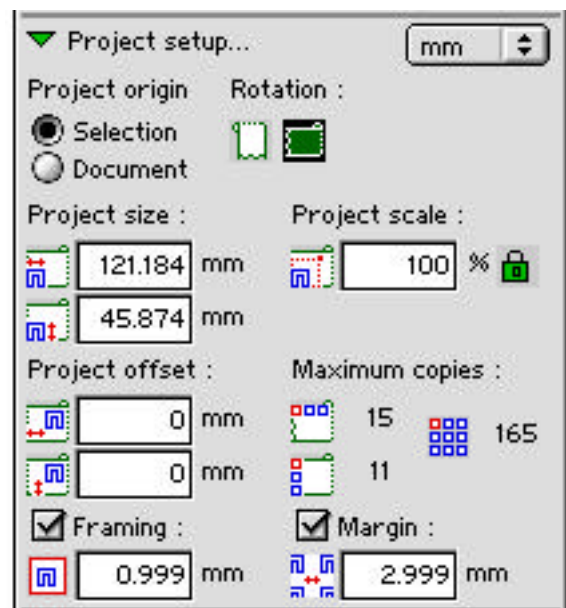
7. Activate the selection tool of Adobe Illustrator



8. Select the letters “NCS” from the logo.



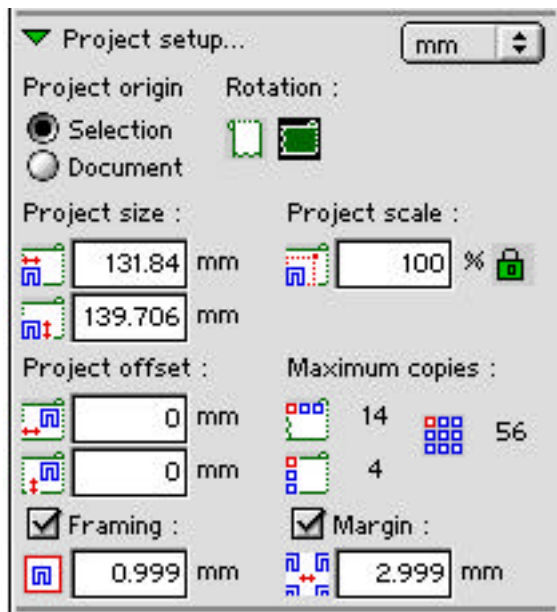
NCS MagiSign computes immediately the size of the selection and filled the fields of the Project manager with different values.



9. Select now the complete logo.



NCS MagiSign modifies the content of the fields : This manager develops its informations.



As shown, **NCS MagiSign** reacts to any modification of the selection.

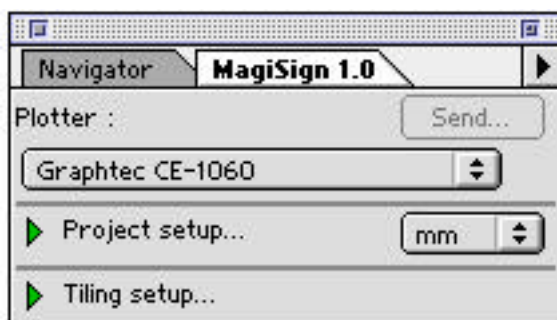
Need to work with a multiple color project as our logo ? To separate colors is as easy as select one item of a specific color and apply the "Edit->Select->Same Fill Color" menu item". All the items of the same color will be selected and thus considered as the current project by MagiSign.

Deselect one path : it will be placed outside the project. Powerful, isn't it ?

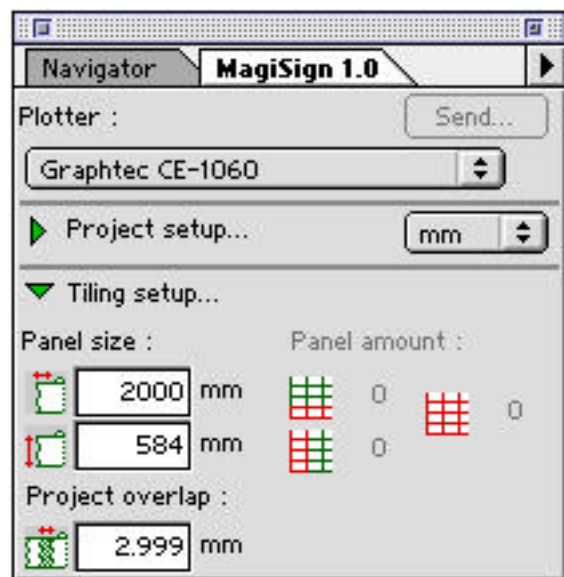
10. Click once on the manager title arrow.



The manager hides its content.



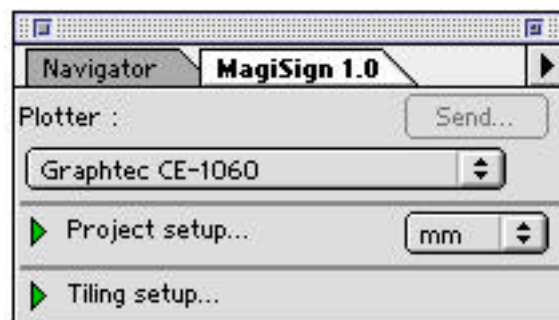
11. Click on the arrow placed before the title of the "Tiling setup" manager.



10. Click once on the manager title arrow.



The manager hides its content.



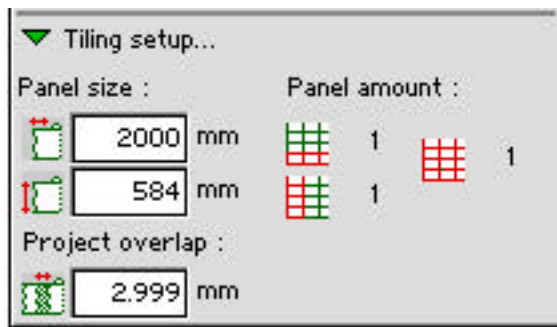
Step 3 : setup

NCS MagiSign divides plotting jobs in 6 processes

- **The Tile manager**
- **The Project manager**
- **The Job manager**
- **The Session manager**
- **The Plotter manager**
- **The Expert manager**

Each one purposes default values and is customizable. The two first are enabled at any time during the creation process. The others appear when you click on the "Send" button.

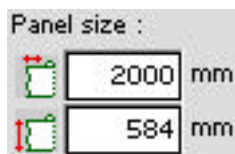
The Tile manager



The **Tile manager** defines the workarea of the material placed on your cutting plotter. To avoid any damages, **it is essential to always adjust the values of those field as soon as possible in your production process** whenever you change the position of the origin of the plotter or whenever you change of material.

Width and high of the media

The width and the high of the media installed on the plotter are mentioned in two fields of the "Panel size" area.



As most of the fields of **NCS MagiSign**, they are identified by a specific icon.



The icon represents a roll of foil. The bubble in one of the corner indicates the position of the roller and by the way the direction of threatment of the material.



Arrows indicate the axis expressed by the content of the field :



Plotter axis system

The position and the orientation of the roll depend both of the axis system of the plotter and of the angle of rotation applied to the artwork during its reproduction.

Some cutting plotters on the market provide a single axis of reproduction. Few other offers the choice between two or three axis. By default, **NCS MagiSign** purposes to use the manufactory axis for each plotter. For models with diferent axis, the one to use for the reproduction of a project can be modified through the menu options of the plotter or through switches on the plotter motherboard. Anyway, **it's essential to indicate to NCS MagiSign which axis is activated on the plotter**. It provides at this purpose an axis area at the bottom of the Tiling manager.

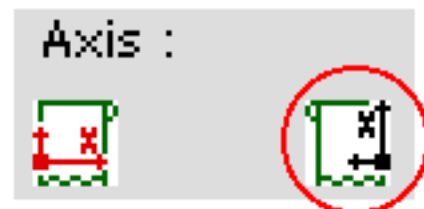
The various axis available on a plotter are identified by a specific icon.



The would recognise the symbol of a roll of foil. The icon with red arrows indicates the selected axis.



The one with black arrows indicates other available axis of the plotter currently not selected.



The dot at the intersection of the arrows indicates the position of the origin of the plotter on the foil.



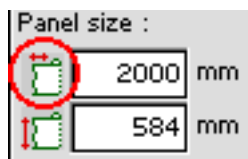
Once defined, the axis of a plotter would never be changed.

To poll the size of the media in the plotter

The high and the width of the material can be edited by the customer. Commonly, plotters can return themselves a more accurate result at the request of the customer.

To poll the size of the media on the plotter :

1. Setup your plotter so it will be ready to start a job.
2. Click one of the icon at the right of one of the fields related to the panel size.



A dialog appears and ask you to confirm your plotter is ready to receive a request.

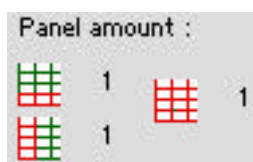
3. Validate your request by one click on the “Ok” button.

After few second, **NCS MagiSign** replaces the values displayed in both the “width” and the “high” fields of the panel size area.

In practice, many plotters read only the high of the foil but return a theoretical value for the width, equivalent, for example, to the total length of a roll of material, e.g. 25 meters. In this case, we strongly recommend to edit the content of the “Width” field and to enter a value corresponding to the length of media your plotter can treat in one step without any misfeeding (e.g. 2 meters).

Tiling and panel amount

If more than one tile is required to produced a project, **NCS MagiSign** inform you of this fact through the bottom fields.



The left ones indicate the amount of tiles required for each axis of the project. The red part of the icons represents the relative axis.

The right one resumes the situation by providing the total amount of tiles required for your project.

Thus, using **NCS MagiSign**, you don't have to care about tiling : we will do the job for you during the plot session. If for example you need to produce a project higher the maximum high of you plotter, **NCS MagiSign** will proceed it for you.

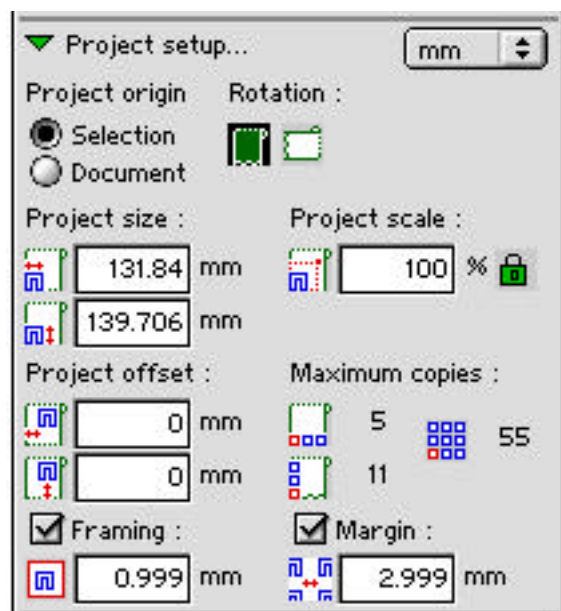
Tiling and overlapping

When more than one tile is required for a project, **NCS MagiSign** allows you to define an overlap, meaning a part of the project reproduced on both tiles to facilitate the further assembly of each one (see illustration in the section about the “Job manager”). All you have to do is to enter the value of your choice in the “Overlap” field :



Hint : one click on the above icon initials the corresponding field at 0 mm.

The Project manager



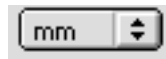
The **Project manager** provides the most important features to transform an artwork into a sign project, i.e. unlimited scale by size and by percentage, offset, frame and margin.

The values are updated at any time following the selection, so you may for example design a project at its printing size in Adobe Illustrator and specify the corresponding scale needed to transform it in sign. Adobe Illustrator will then display the value in original size, while **NCS MagiSign** project manager display it at the defined scale.

The Project manager displays additional information, as the maximum copies of the project available on the width and the high of one tile.

The size unit

A popup menu placed on the top of the “Project manager” let you change the unit at your convenience.



1. Press the mouse on the pop-up menu and select the unit of your choice.

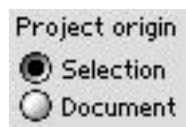
The choice is larger than the Adobe Illustrator one and includes feet and meters.

2. Release the mouse button.

All the fields of **NCS MagiSign** are immediately adapted in relationship with your choice.

The unit inside **NCS MagiSign** palette is independant of the unit used by Adobe Illustrator so it's possible to use centimeters ou meter in our palette while you use mm or points in your design software.

The project origin



Two radio buttons purposes you to specify if **NCS MagiSign** will or not take account of the position of the selection within the Adobe Illustrator document.

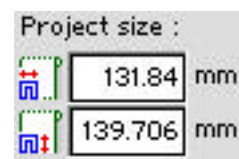
By default, “Selection” is activated, meaning **NCS MagiSign** will fit the project to the selection. In other word, when “selection” is activated, the

dimensions indicated below correspond to those of the selection multiplied by the scaling factor. When the scaling is “100%”, the size is thus exactly the size of the smallest rectangle which allows for the inclusion of all the selected items. While plotting, **NCS MagiSign** will reproduce those items as closed as possible of the origin of the plotter. By the way, it's fast and easy to prepare and cut any project. All you have to do is to select the items of your choice and to send them to the plotter without to worry about the dimension and position of the selection.

While “Document” is activated, **NCS MagiSign** uses the origin of the document in Adobe Illustrator as origin for the project, meaning its width and its high will correspond to the size of the rectangle which has for lower left origin the “0,0” of the rule and as top higher origin the higher right origin of the selection. This method is less used than the first and assumes sometimes wasteage of material, but it makes the juxtaposition of vinyle of different colours easier for specific and complex projects, since all the colors use the identical origin as reference (mainly useful for screenprinting).

To modify the size of a project

The width and the high of the project are mentionned in the two fields of the “Project size” area.



As most of the fields of **NCS MagiSign**, they are identified by a specific icon.



You would recognise here the roll of foil described about the “Tiling manager”.

The project itself is schematised by a small desktop placed over the foil.



Arrows indicates the relative axis expressed by the content of the field :



The position and the orientation of the project icon varie following other parameters and illustrate the placement of the project on the material during its reproduction The icons above indicate for example that the project will be reproduced in the bottom left corner of the vinyle while you stay in front of your cutting plotter.

Each time the selection is modified within Adobe Illustrator, **NCS MagiSign** calculates the dimensions of the corresponding project in its own environment : the size of the selected items is always computed and scaled as if the selection had no stroke (this notion can't be reproduced by cutting plotter).

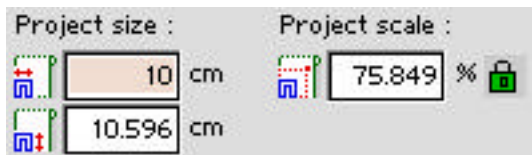
All the values appearing in the dialog are consequently adapted, including the "Scale" ones.

Reminder : To extract the outlines from a path with a stroke value greater than 1 point, apply the "Path->Outline stroke" item of the "Object" menu to your artwork. By the way, Adobe Illustrator will provides you the way to represent the stroke of any path.

To cut the "NCS" logo on 10 cm width, for example, you would proceed as follow :

1. Choose "cm" in the unit menu.
2. Enter "10" in the "width" field.
3. Enter the value of you choice as "High".

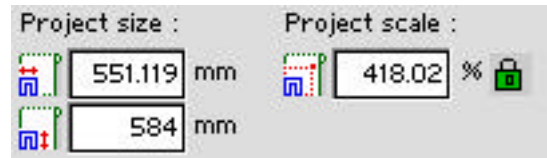
NCS MagiSign will immediately compute the scale to the project and update the palette values, so you would see :



While modifying the values within **NCS MagiSign**, your artwork keep unmodified as the result will only be applied during the reproduction process of your project.

Hint : to produce a sign as big as possible on the foil placed on the cutting plotter, click once on the "Width" or "Height" icon : it will return the maximum scale to reproduce the selection on one tile as this one is defined through the "Tiling" manager. Sure, it's suppose you have check the tiling info before to click and, better, to have read it from the plotter.

Following the values defined above for a tile, we would for example obtain :



To modify the scale

An other rmethod to modify the size of reproduction of your project is to modify its scale.

Anyway, you have the choice to prepare each of your projects at their original scale (100%) or to determined scale (1/10, 1/20,...).

The advantage of the first method resides in the possibility of safeguarding a project such as it should be prepared.

The second method offers the same adavantage as the preceding method. It also permits to prepare projects of a superior size to the maximum one of an Adobe document. **NCS MagiSign** is not limited by the Adobe Illustrator own limits and allows you to produce signs bigger you would ever dream. You can hence easily exploit the richness of many collections of scaled drawings and reproduce them on bus or trucks, or bigger if required.



By default, **NCS MagiSign** keep the proportions of your artwork so the scale is provided in percent in one field.



This field is identified by the following icon.

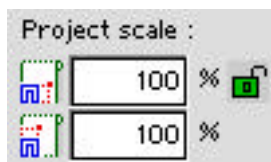


You would recognise the symbol of a roll of foil described about the “Tiling manager” and the one of a ‘Project” described about the “Project manager”.

Red dots show in which direction the items will grow or be reduced.



If ever you agree with some modifications of the proportions, click once the “Lock” icon. From than, you will have the opportunity to define a different scale for both the width and the high of your project.



Both fields are then identified by a specific icon.



You would once again recognise the symbol of a roll of foil described about the “Tiling manager” and the one of a ‘Project” described about the “Project manager”.

Red dots show in which direction the items will grow or be reduced.

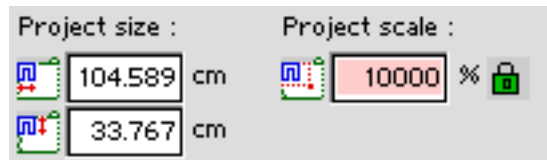
Click once again on the lock to keep back the proportions of your project.

Note : NCS MagiSign memorises all the parameters used in a project and applies them systematically to the next project. You will quickly discover how this can be useful each time that you will have to reproduce one of your creations in several stages, for size of colour reasons. To produce the sign of the truck, for example, we just had to enter once “10000” in the scale field (car design was at 1/100) and to select each color at the time through the “Select-> same fill color” item from the “Edit” menu.

Here, the “yellow” part of the project :



And then the “Black” one :



Make sure however to start from scratch (100%) when you wish to reproduce other creations on your plotter.

Hint : click once on the icon before the “Scale” field to reset the scale to “100%” percent.

To modify the position of a project on a tile

You can impose upon NCS MagiSign to move your project in accordance with the origin of the plotter.

Two fields exist at this purpose.



Both fields are identified by a specific icon.



You would once again recognise the symbol of a roll of foil described about the “Tiling manager” and the one of a ‘Project” described about the “Project manager”.

Red arrows indicate from which border and in which direction the items will be moved. This mainly depends of the position of the origin of the plotter itself and of its axis system.



To move the project is mainly useful while something has already been reproduced on the foil to avoid any overlap of the items.

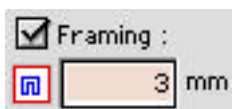


Hint : one click on one of the above icon initials the corresponding field at 0 mm.

To define framing

Given the weeding of the media, it is often practical to add a net of determined distance around each copy of a project.

NCS MagiSign purposes a check box at this purpose. While checked, a field let you enter the offset to apply between the frame and the border of the project.



This field is identified by a specific icon.



You would recognise the symbol of the 'Project' surrounded by a red frame.

Few milimeters are often eanough to make the weeding easier.

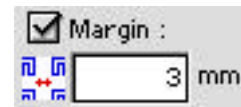


Hint : one click on the above icon initials the corresponding field at 0 mm.

To define a margin

Using sign cutting plotter, it is advisable to leave a margin between each copy of a project.

NCS MagiSign purposes a check box at this purpose. While checked, a field let you enter the offset to apply between each copy of the project.



This field is identified by a specific icon.



You would recognise 4 symbols of the 'Project' with some offset between each one.

Few milimeters are often enough to avoid any overlap of copies due to misfeeding of the foil by the cutting plotters.



Hint : one click on the above icon initials the corresponding field at 0 mm.

Project and amount of copies

While a single tile is required to produce a project, **NCS MagiSign** continuously calculates the amount of copies of a project which it is possible to reproduce on the surface of this tile. It indicates the result through the bottom fields.



The left ones indicate the amount of copies possible for each axis of the project.

The right one resumes the maximum for the tile.

Reproduction axis system

Two icons of the "Project manager" allows to choose the reproduction axle of a project.



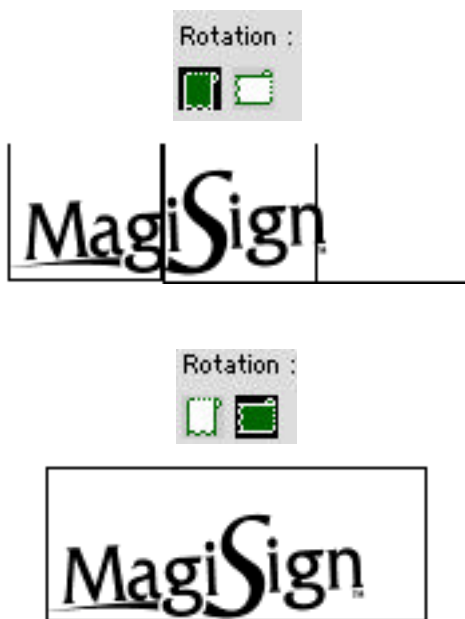
As most of the fields of **NCS MagiSign**, they are identified by a specific icon.

You would recognise the symbol of a roll of foil. The one of the 2 icons filled with green is the selected one. Click once on the other to activate the other axis of reproduction.

Note : if you don't obtain the supposed result on your sign cutting plotter, check without delay the plotter axis selected through the "Tile" manager and the dimensions of the tile indicated in the same manager.

To compare with a printer driver, we would say those icons allow you to reproduce what you see on your display in "Portrait" (first icon selected) or in "Landscape" mode (second icon selected).

To change of axle is mainly useful to reduce the waste of material. In the example above, the use of the opposite axis would have required 3 tiles, as shown here below, while the choice of the "Landscape" mode (here above) required only one tile !



First plot

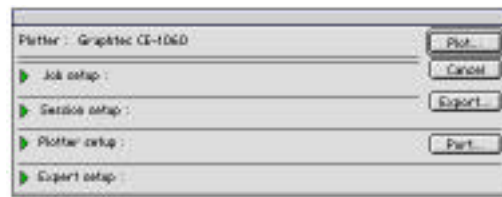
The "Project" and the "Tile" managers of **NCS MagiSign** are at your fingertips at any moment in Adobe Illustrator.

To reproduce your project on your cutting plotter, click once on the "Send..." button at the top of the palette.

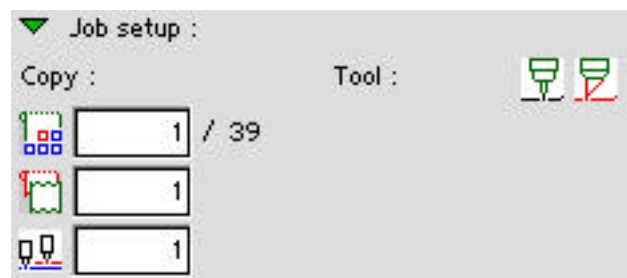


NCS MagiSign will give you immediate access to the 4 other managers : the **Job manager**, the

Session manager, the **Plotter manager** and the **Expert manager**.



The Job manager



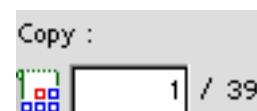
The **Job manager** defines the range of tiles and the amount of copies of the project as of the tiles to reproduce during the next process.

It is also here that you will choose the tool to be used by the plotter : a pen, a cutter, a milling tool, etc.

To reproduce several sets

As we have seen above, **NCS MagiSign** continuously calculates the amount of copies of a project which it is possible to reproduce on the surface of a panel.

One field of the "Job manager" purposes you to define how much sets will be reproduced during the current job on the plotter.



This field is identified by a specific icon.



You would recognise the symbol of a roll of foil described about the "Tiling manager". The copies of the 'Project' are symbolized here by a small square.

The disposition of the raw of square on the roll icon illustrates the direction and the distribution of the copies.



Supposing the above icon, the copies would be reproduced from the bottom right corner of the foil in direction of its top left.

A reminder of the maximum copies is placed after the field.



Having sent the data to the plotter, **NCS MagiSign** will immediately distribute the datas on the width of the vinyl and carry out the translation necessary for each copy.

The previously defined margin will be applied between all of them.

Hint : One click on the “Set” icon initials the field at the maximum number of copies which it is possible to produce on one tile.

To reproduce several copies of the tile

NCS MagiSign allows you to define the amount of the copies to produce during the current job. This information can be edited through a field.



This field is identified by a specific icon.



You would recognise the roll of foil described about the “Tiling manager”. It appears here duplicated.

Note that at the opposite of the former function, the project isn’t translated for each copy, so as to make all the tiles identical.

To obtain large quantities of the same project, you can combine the number of copies of this panel with the maximum set of it on a tile.

Hint : one click on the “Copy tile” icon initials the field at 1 unit.

To treat hard materials

NCS MagiSign can reproduce a project on hard material in multiple passages of the tool. The ammount of passages to apply for a job can be edited in the following field.



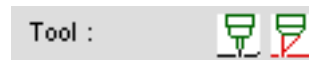
This field is identified by an icon showing 2 passages of a tool.

The use of this features depends highly of the precision of your cutting plotter. In practice, it is mainly reserved for flatbed plotters owner.

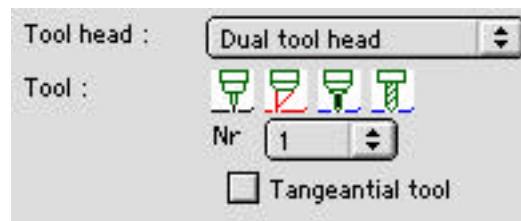
Hint : one click on the “Passages” icon initials the field at 1 unit.

To select a tool

The choice of the tool employed on the plotter for the reproduction of a project must be choosen by selecting one icon between the various ones purposed.



The amount and the variety of tools depend from models of plotter. While many sign cutting plotters only use pens and cutters, some flatbed can use various kind of heads with various tools.



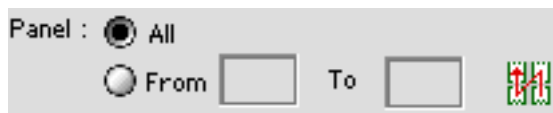
How to produce large signs

The size of a project is independant from the size of the tiles that your plotter can treat. We demonstrate it in the “Tile manager” description.

NCS MagiSign continuously computes the number of tiles required to produce a project.

If more than one tile is required, **NCS MagiSign** detects it and displays the amount of tiles in the “Tiling manager”.

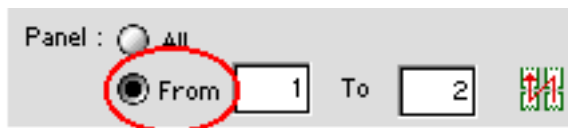
In the same conditions, the “Job manager” displays the following features :



Two radio buttons allow you to either transfer all the panels at once to your plotter or to transfer only a part of the project and treat the rest later.



Click on “All” to obtain all the tiles at once. In this case, MagiSign wil produce all the required panels one after one, with an optional pause between each copy (see “Session manager” about pause).



Click on the radio button “From” to define a selection of tiles to be reproduced.

An icon placed after the “To” field symbolises the order followed by NCS MagiSign to proceed at the tiling.



You would recognise 4 copies of a tile of foil. The red arrow indicates the order of process of all the panels.

Example of tiling

To produce our logo on one meter high with a 584 mm plotter, for example, just enter 1 meter as “High” for the project, send all to the plotter and let NCS MagiSign proceed.

You will obtain 2 tiles as result.

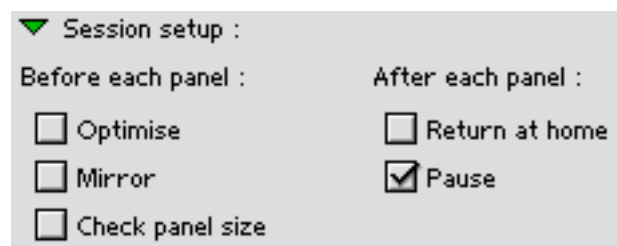


As shown in the below figure, the point of start of the second tile vary following the “overlap” value.

The red area illustrates the part of the project reproduced on both tiles.

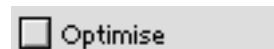


The Session manager



The **Session manager** defines the environment of the next process, meaning what to do before and after a job.

Optimise

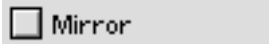


By default, **NCS MagiSign** reproduces all the selected paths of a project in the same order they were created within Adobe Illustrator, from the topmost to the bottommost path.

This results sometimes in unnecessary movements of the plotter head you could avoid by checking the “Optimise” option. To avoid this, a powerfull algorithm has been developped and sort all the paths following cutting rules, so islands inside a path will be cut before the path itself and all the path of the same level will be reproduced in order to reduced the moves of the material from bottom to rear on the plotter.

Click once on the check box to enable or disable this feature. But care to not activate it if you don't have allocated at least 20 mb of extra memory to Adobe Illustrator.

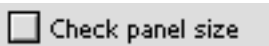
Mirror



Do you ever need to place a sign rear a window ? This features allows to produce a mirror effect at the moment of the reproduction, meaning you don't have to setup your artwork in Adobe Illustrator to obtain it.

Just check this option when needed.

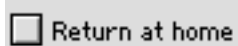
Check panel size



As we have shown about the Tiling manager, **NCS MagiSign** allows you to poll the material size on the plotter by one click on the icon before the high or the width field of the Tiling size area.

To have the benefits of the computation done at any modification of the palette, it's recommended to check the size of the material using the previous said method. However if you commonly forget to do it, check this option so **NCS MagiSign** will verify the size of the tile for any job send to the plotter.

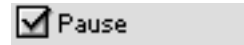
Return at home



By default, after each job, **NCS MagiSign** loads the vinyl and places the origin of the plotter at the end of the current job. However, you could prefer to keep the origin of a job and to cut other paths from this one (supposing to avoid waste of material, for example). Just check the box described here and it will be done for any further job.

Note : this option must be checked on flatbed plotter without automatic feeder.

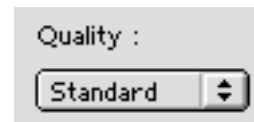
Pause



Through this feature, **NCS MagiSign** allows you to specify if the plotter should pause before starting the treatment of any tile.

This option would be unchecked ONLY if you are sure that the precision of the feeder of your cutter is high enough to proceed to the feeding of tiles without any manual ajustement so you don't want the plotter pause for each job.

Quality



NCS MagiSign is known for the quality of its smooth curves. Mainly, it's due to the high quality of our algorithms. The amount of segments we are sending to a plotter to cut any path is higher than many of sign software do. Meanwhile, if you prefer speed to quality, you could choose a lower quality than our standard throught the quality menu described here. At the opposite, if you want highest quality, we purpose you a "Superior" quality option.

The **Plotter manager**

Plotter setup :

☐ Use current plotter setup

☒ Customize plotter setup :

☒ Tool up velocity : cm/sec

☒ Tool down velocity : cm/sec

☒ Force : gf

☒ Acceleration G

The **Plotter manager** defines the plotter setup of the current process by defining parameters like tool velocity, pressure, acceleration, etc.

Developping **NCS MagiSign**, we keep in mind you, the customer. Our first rule was to keep your freedom.

For all models, we thus purpose a “Use current plotter setup” radio-button.

☒ Use current plotter setup

Just click once on this button if you don't want or don't know how to play with parameters like speed, pressure, etc. None of the plotter parameters will be modified while sending data's to your plotter. If it is your choice to setup your plotter from its menus and to not modify it by software, we respect it. In practice, we would recommend this setup for any novice in the signmaking industry.

At the opposite, for all models, we purpose a “Customise plotter setup” radio button.

☒ Customize plotter setup :

Once you have acquire any experience with parameters like speed and pressure, you could prefer to control your plotter from our software. Just select the “Customise plotter setup” radio button and you will be able to realise your wish.

Another of our rules was to offer you as many useful options that a plotter model could offer. This explains why the content of the plotter manager varies from one plotter model to another.

☒ Tool up velocity : cm/sec

☒ Tool down velocity : cm/sec

☒ Force : gf

☒ Acceleration G

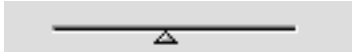
Despite some similitudes exist between brand and models, each one has its own range of commands.

Note : some plotters have to be setup before they would agree software commands. It's the case for Anagraph models, for which you have to enable external command. It's also the case for some Roland models, where “FS-CMD” and “VS-CMD” must be enable before you use **NCS MagiSign** command for their setup. Take a look at your plotter manual at this purpose.

For each command, a checkbox allows to decide if you will modify or not its setup by software.

☒ Tool up velocity :

The third rule has been to not oblige you to learn the range of values agreed by your model. For each of the more than 350 models of plotter compatible with **NCS MagiSign**, we care to collect the right range of values for each command. For many commands, it reduces your task to move a slide.



Whenever possible, the value can also be edited in a field. The result is naturally checked by **NCS MagiSign** to avoid any out of range value...



All you have to do is thus to learn step by step the effect of each command on your production. Mainly, the manual of each plotter defines common values you would test and modify following your needs.

The **Expert manager**



The **Expert manager** complete the plotter setup. You will find there two kind of informations.

First, some setup command not seldom used, reserved for real expert. Note would could be greyed as uneditable if the "Use current plotter setup" radio-button is checked.

Then follows the definition of setup like the plotter emulation or the resolution. **Those values must be entered in accordance with the plotter.** You would normally have to modify them only the first time you will setup NCS MagiSign to drive your plotter.

Step 4 : cut

Transfer to plotter

When the values of your choice are defined in each manager, you just have to click on the "Plot" button.

A dialog will ask you to confirm your plotter is ready to receive the data. At this moment, we highly recommend you to take a latest look at your environment :

- is your plotter on and online ?
- is the right tool on the plotter ?
- is the right speed defined for the job ?
- is there no risico of misfeeding of the material ?
- is nobody on the way of the tool or of the material (care to tiles !) ?
- do you indicate the right size for the tile in **NCS MagiSign** ? Better, have you poll it on the plotter ?

Only confirm it when you are sure that no external source could disturb the reproduction of your project. And than, you will see your plotter moving and producing your signs.

As far as the job is done, you will be back in Adobe Illustrator, ready to prepare an other job...

Produce more

Each time that you transfer a project to your plotter, **NCS MagiSign** memorises the production context and applies by default the same parameters to the next project.

Let us suppose, for example, that you wish to reproduce our NCS logo.

1. Setup **NCS MagiSign** for the "NCS" letters and transfer them to your plotter.
2. Select the rectangle of the same color and send it immediately to the plotter. As you had already defined the scale and parameters of your choice for the first part, you don't have to modify setup.
3. Remove the first foil and place another color of vinyl on your plotter.

4. Check the size of this new material through the “Tile manager”. For the rest, the same setup could be applied.

5. Send to the plotter...

It's done. You can now weed and assemble your creation.

We keep at your disposal for any further information about **NCS MagiSign**.

You are welcome to contact us.

Enjoy your work with

NCS MagiSign...

Sign Cutting Plotter Compatibility Chart

Anagraph

Anagraph ANA Express 60E
Anagraph ANA Express 70E
Anagraph ANA Express 101E
Anagraph ANA Express 120E

Anagraph ANA Express 60
Anagraph ANA Express 70
Anagraph ANA Express 101
Anagraph ANA Express 120

Aristo

Aristo AG 50
Aristo Aristograph 540
Aristo Aristograph 540W
Aristo AG 75
Aristo Aristograph 750
Aristo Aristograph 750W
Aristo AG 130
Aristo Aristograph 1300
Aristo Aristograph 1301
Aristo AG 50W

Aristomat 1310 Liberty
Aristomat 1317 Liberty
Aristomat 1625 Liberty
Aristomat 1616 Liberty

Aristograph 50 ff

Aristo Aristograph 600

Aristo Aristograph 1200

Aristomat 212
Aristomat 214L
Aristomat 214Q
Aristomat 216
Aristomat 218

Calcomp Summagraphics

SummaCut D15
SummaCut D500
SummaCut D520
SummaCut D620
SummaCut D760
SummaCut D1020
SummaCut D1220
SummaCut D60
SummaCut D120

Summagraphics D1000

Summagraphics DMP-65C
Summagraphics DMP-66C
Summagraphics DMP-69C
Summagraphics DMP-100C

Summagraphics T1000

Summagraphics T600

SummaSign Pro D610
SummaSign Pro D750

SummaSign Pro D1010
SummaSign Pro D1300
SummaSign Pro T610
SummaSign Pro T750
SummaSign Pro T1010
SummaSign Pro T1300
SummaSign Pro TS1010

SummaSign D610
SummaSign D750
SummaSign D1010
SummaSign D1300
SummaSign T610
SummaSign T750
SummaSign T1010
SummaSign T1300
SummaSign TS1010

Dilli New Star

New Star Omega 40
New Star Omega 60
New Star Omega 70
New Star Omega 80
New Star Omega 100
New Star Omega 130

Encad

Encad Novacut 24
Encad Novacut 54
[* cut, don't print !]

GBC Signwarehouse

Vinyl Express Lynx 12
Vinyl Express Lynx 24

Vinyl Express Ultra GRC 50x
Vinyl Express Ultra GRC 61x
Vinyl Express Ultra GRC 76x
Vinyl Express Ultra GRC 101x
Vinyl Express Ultra GRC 132x

GCC

GFC-02

GRC-03

SignPal GRC-30
SignPal GRC-50
SignPal GRC-60

SignPal 98 GRC-30
SignPal 98 GRC-50
SignPal 98 GRC-60

SignPal Supreme GRC-61
SignPal Supreme GRC-76S
SignPal Supreme GRC-101S
SignPal Supreme GRC-132S

SignPal 98 Supreme GRC-61
SignPal 98 Supreme GRC-76S
SignPal 98 Supreme GRC-101S
SignPal 98 Supreme GRC-132S

GCC Lynx 12
GCC Lynx 24

SignPal 98 Ultra GRC-50x
SignPal 98 Ultra GRC-61x
SignPal 98 Ultra GRC-76x
SignPal 98 Ultra GRC-101x
SignPal 98 Ultra GRC-132x

Gerber

Gerber EmbossTrack-621 CT-C...
Gerber EmbossTrack-941 CT-C...
Gerber EmbossTrack-1251 C...

Gerber FasTrack-650
Gerber FasTrack-750
Gerber FasTrack-1000
Gerber FasTrack-1300

Graphtec

Graphtec CE-1000-60

Graphtec FC 2100-50
Graphtec FC 2100-60
Graphtec FC 2100-60A
Graphtec FC 2100-90
Graphtec FC 2100-90A
Graphtec FC 2100-120

Graphtec FC 2200-30
Graphtec FC 2200-45
Graphtec FC 2200-50
Graphtec FC 2200-50M
Graphtec FC 2200-90
Graphtec FC 2200-90EX
Graphtec FC 2201-90
Graphtec FC 2201-90 VCT
Graphtec FC 2201-90EX
Graphtec FC 2201-90EX VCT
Graphtec FC 2202-90
Graphtec FC 2202-90 VCT
Graphtec FC 2202-90EX
Graphtec FC 2202-90EX VCT

Graphtec FC 2300-50

Graphtec FC 3100-60
Graphtec FC 3100-100
Graphtec FC 3100-120

Graphtec FC 4100-75
Graphtec FC 4100-100
Graphtec FC 4100-130

Graphtec SignJet Pro JX 1060*
Graphtec SignJet Pro JX 1130*
[* cut, don't print !]

Houston Instrument...

Houston Instrument DMP-40
Houston Instrument DMP-40V
Houston Instrument DMP-65C
Houston Instrument DMP-66C
Houston Instrument DMP-67C
Houston Instrument DMP-68C

HPGL*

[* minimum driver]

Ioline

Ioline Classic (24')

Ioline LP3700 ArtPro
Ioline LP4000 ArtPro

Ioline Signature 5000
Ioline Signature 5400

Ioline Studio 7-24
Ioline Studio 7-36

Ioline Studio 8-20
Ioline Studio 8-30
Ioline Studio 8-40
Ioline Studio 8-40 A
Ioline Studio 8-40 T
Ioline Studio 8-52

Ioline Summit 910
Ioline Summit 2200

Ioline Super 88-30
Ioline Super 88-30 GS
Ioline Super 88-40
Ioline Super 88-40 GS
Ioline Super 88-52
Ioline Super 88-52 GS/DR

Ioline SmarTrac-24
Ioline Super 88-30
Ioline Super 88-40
Ioline Super 88-52

Mimaki

Mimaki CG-45...
Mimaki CG-60...
Mimaki CG-90...
Mimaki CG-120...

Mimaki CG-5...
Mimaki CG-6...
Mimaki CG-9...
Mimaki CG-12...

Mimaki CG-50...
Mimaki CG-100...

Mimaki CG-60ST...

Mimaki CG-90AP...
Mimaki CG-90APR...

Mimaki CG-90SD...

Mimaki CG-90TR...

Mimaki CG-120R...

Mimaki CG-51...
Mimaki CG-61...
Mimaki CG-101...
Mimaki CG-121...

Mimaki CG-60L...
Mimaki CG-90L...

Mimaki CG-60EX...
Mimaki CG-100EX...
Mimaki CG-130EX...

Mimaki CF-100LX...
Mimaki CF-130LX...

Mutoh

Junior 24

Mutoh MC-1000...
Mutoh MC-1300...
Mutoh MC-1650...

Mutoh MC-650S...
Mutoh MC-750S...
Mutoh MC-1000S...
Mutoh MC-1300S...

Mutoh SC-550
Mutoh SC-650
Mutoh SC-750
Mutoh SC-1000
Mutoh SC-1300

Mutoh SC-E650
Mutoh SC-E750
Mutoh SC-E1000
Mutoh SC-E1300

Mutoh TC-650...
Mutoh TC-750...
Mutoh TC-1000...
Mutoh TC-1300...

Mutoh XP-621 CT-C...
Mutoh XP-941 CT-C...
Mutoh XP-1251 C...
Mutoh XP-1650...

Roland

Roland CAMM-1 CM-12
Roland CAMM-1 CM-24

Roland CAMM-1 CM-300
Roland CAMM-1 CM-400
Roland CAMM-1 CM-500

Roland CAMM-1 PNC-1000
Roland CAMM-1 PNC-1000A
Roland CAMM-1 PNC-1050

Roland CAMM-1 PNC-1100

Roland CAMM-1 PNC 1200
Roland CAMM-1 PNC 1210

Roland CAMM-1 PNC 1410

Roland CAMM-1 PNC 1600
Roland CAMM-1 PNC 1610

Roland CAMM-1 PNC-1800
Roland CAMM-1 PNC-1850
Roland CAMM-1 PNC 1860

Roland CAMM-1 PNC 19xx
Roland CAMM-1 PNC-1900
Roland CAMM-1 PNC 1910

Roland CAMM-1 PNC-900

Roland CAMM-1 PNC 910
Roland CAMM-1 PNC-950
Roland CAMM-1 PNC 960

Roland CAMM JET CJ-60
Roland CAMM JET CJ-70
[* cut only, don't print]

Roland ColorCAMM PNC-5000
Roland ColorCAMM PC-50
Roland ColorCAMM PC-60
[* cut only, don't print]

Roland Stika STX-7
Roland Stika STX-8

Summa & Summagraphics

*See Calcomp Summagraphics...

Wild

Wild TA 2
Wild TA 2L

Wild TA 10
Wild TA 10 BL
Wild TA 10 BXL
Wild TA 10 S

Wild TA 30

Wild TA 40
Wild TA 40 ST
Wild TA 41

Wild TA 100
Wild TA 100 BL
Wild TA 100 BXL
Wild TA 100 S

Wild TA 410
Wild TA 410ES
Wild TA 400

Wild TA 500M
Wild TA 500MC
Wild TA 510
Wild TA 510S

Zund

Zünd P 700
Zünd P 1200
Zünd P 1200 Plus
Zünd P 2000

Zünd M 800
Zünd M 1200
Zünd M 1600

Zünd L 800
Zünd L 1200
Zünd L 1600
Zünd L 2500

Zünd XL 800
Zünd XL 1200
Zünd XL 2500