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VISION-PRO

Engraving and Routing Software

Tutorials

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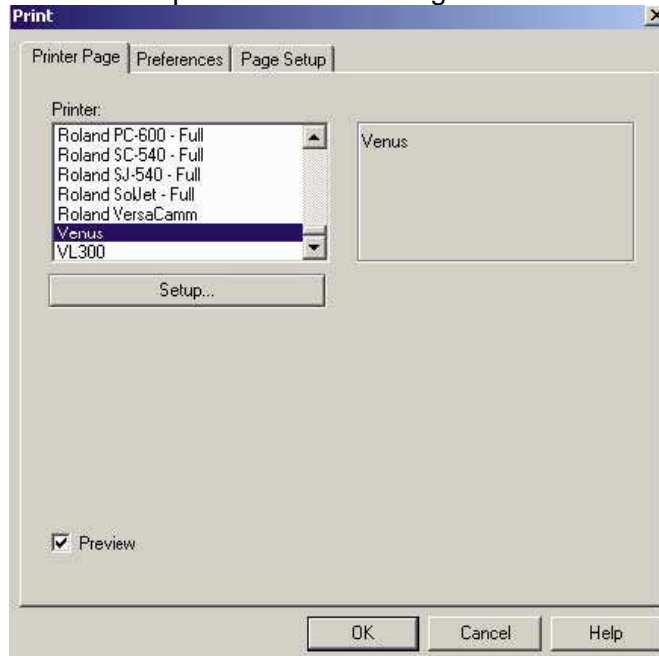
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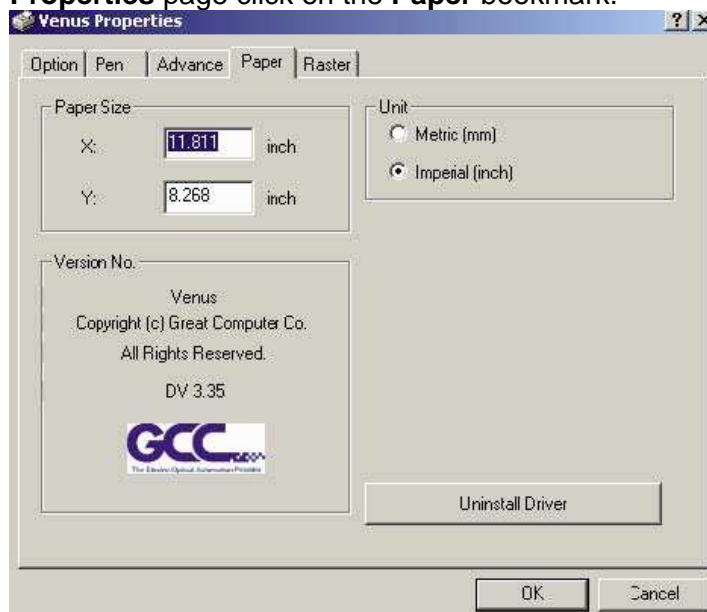
How to Create and Print a 3D Sample

Setting Plate Size

You will want to ensure that your plate size is not larger than your laser engraver will allow. To verify the allotted printing space, click **File** then **Print**. This opens the **Print** dialog box.

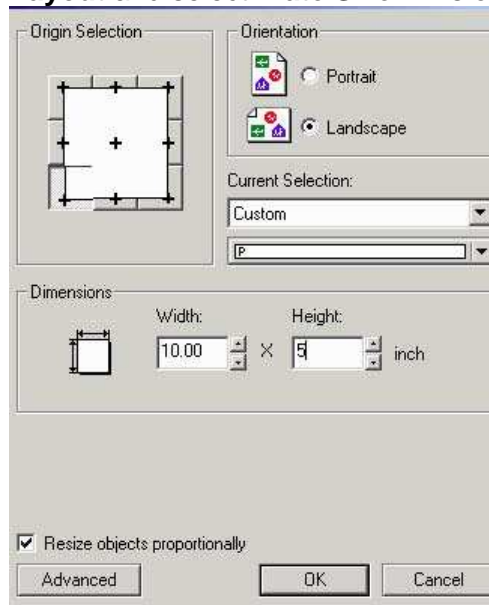


Select your engraver from the list and click **Setup**, then in the **Printer Properties** page click on the **Paper** bookmark.



In this example we will want to keep our plate size smaller than 11.811inches by 8.268inches. To adjust your plate settings, click on

Layout and select **Plate Size**. This opens the **Plate Size** dialog box.



In this example, our engraver will only allow an area of 11.811 inches by 8.268 inches, we don't want to exceed this. Before continuing we also want to make sure that **Show Fill**, **Show Reduced Bitmap** and **Show Tool Path** are enabled in the **View** menu.



Remember, in this example, our printer will only allow an area of 11.811 inches by 8.268 inches, we don't want to exceed this.

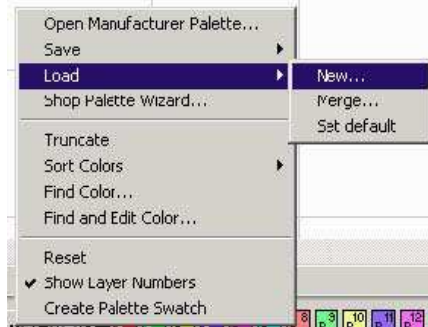
Setting Up the Color Palette

Before we begin, you will need to have Vision Pro open with no items on the screen. We are going to install a color palette, specific for our engraver. At the bottom left of your screen you will want to select the

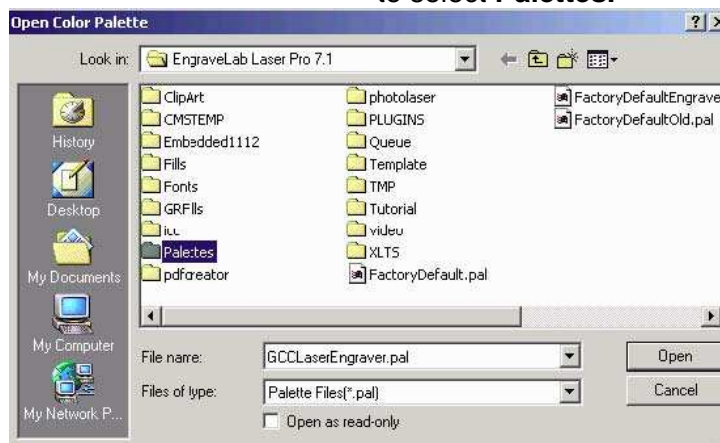
Context Menu button.



This opens a fly out menu, from which, you want to select **Load** then **New**

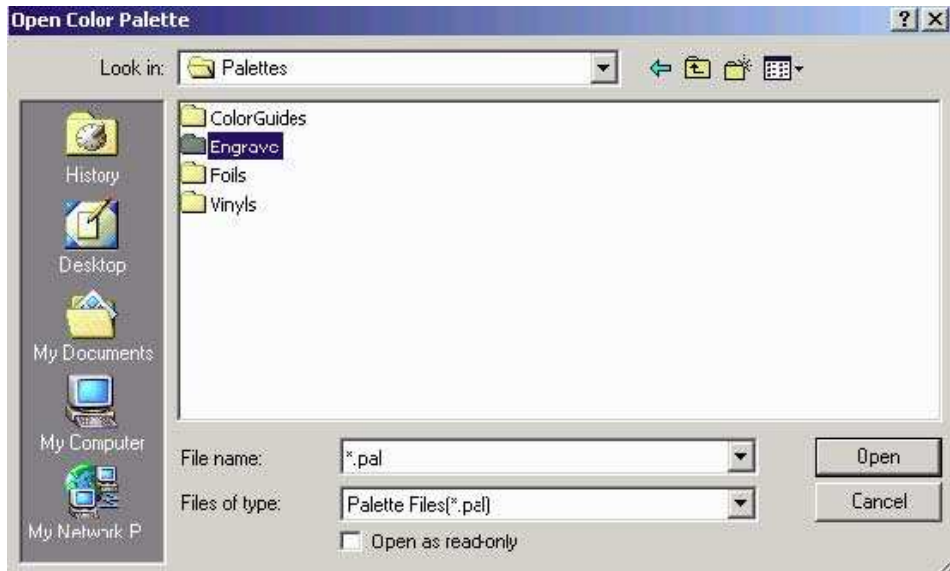


Selecting **New** brings up the **Open Color Palette**. From this, you will want to select **Palettes**.

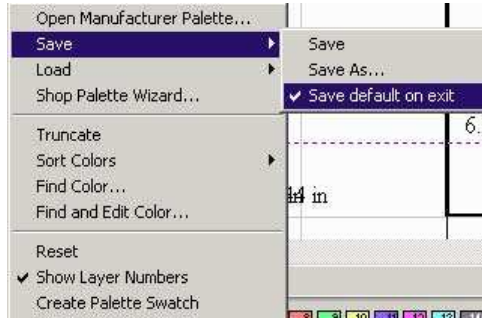


You will then want to select **Engrave**.

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Finally double click on the file that is most compatible with your engraver. In this example we will use **GCCLaserEngraver.pal**. Following this, you will want to ensure that these colors are still present when you reopen Vision Pro. To ensure this, go back to the **Context Menu** at the bottom left of the screen. This time instead of choosing **Load**, you will want to select **Save** and the **Save default on exit**.

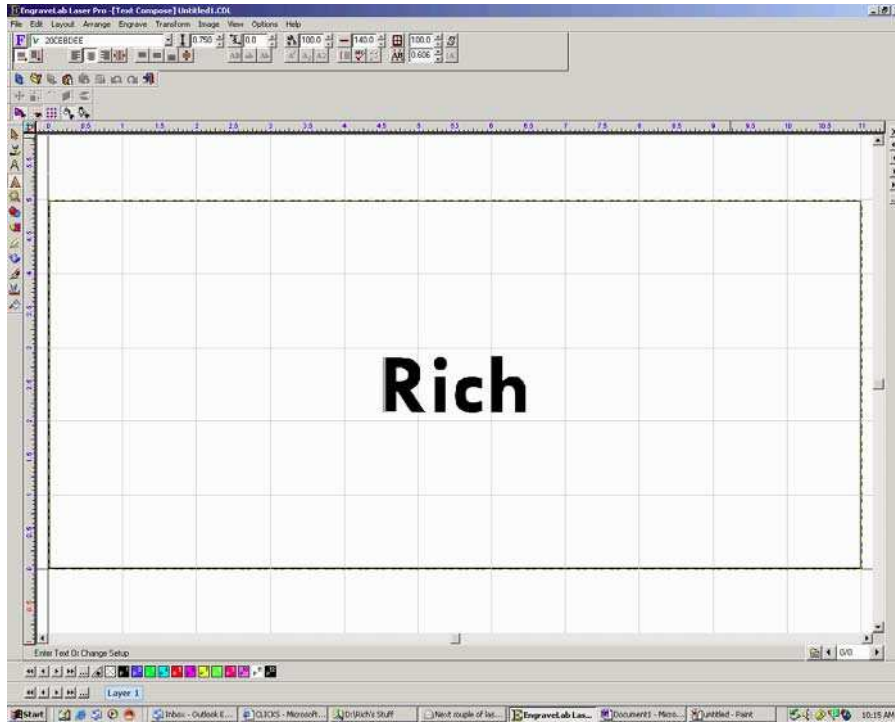


Congrats, you have successfully loaded a new color palette. Please close Vision Pro and reopen to allow the changes to affect. You are now ready to open our tutorial file.

Creating a File for 3D Engraving In this example we will create a file. Open Vision Pro and select **Frame Text Compose** from the **Text Tools** fly out.



To keep things simple we will write our name. We will leave black as the font color, set the font size to .5 inches and set the font type to **20CEBDEE..**



Your screen should look similar to this, the only difference being the name. The first thing you are going to want to do is select the file. The first function we want to use is **Render Contour Bitmap** located in the transform menu



Having done this correctly will bring up the **Contour Bitmap** dialog box.

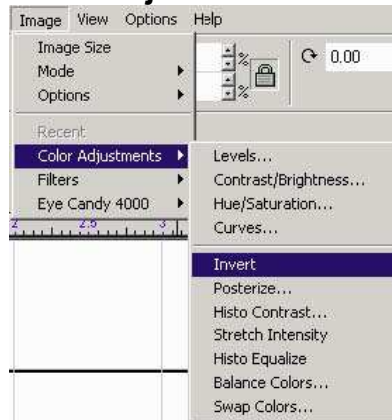


Leave the setting at 100 and click **OK**. Please note, increasing the DPI settings will increase the resolutions of your file. You should

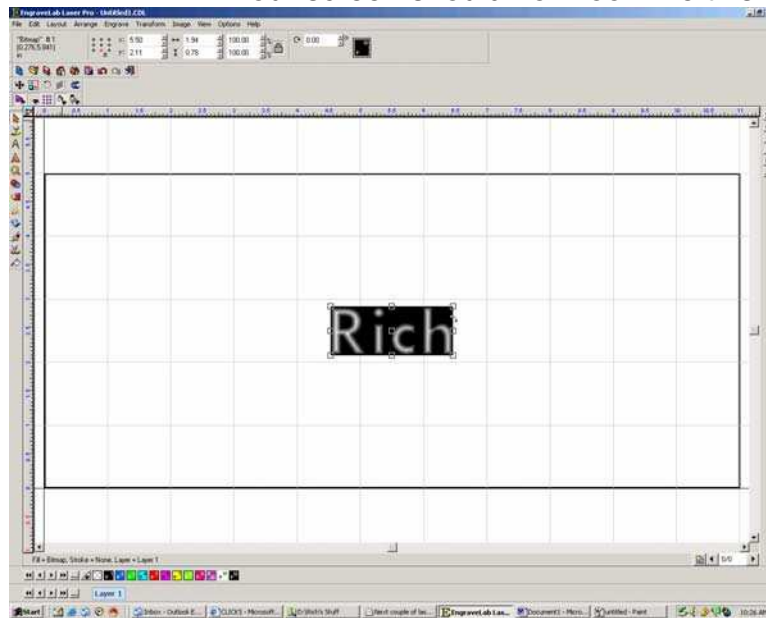
now be returned to the plate screen where you should now notice that the letters seem moderately blurry. Click the **Apply** button at the top to accept changes



We are now going to want to invert the file. Go to **Image**, select **Color Adjustments** and finally **Invert**.



Your screen should now look like this:

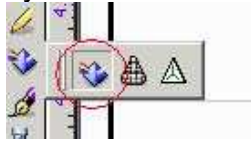


There are two ways to proceed from here. You may simply double click on the writing which opens the **Scan Tools** toolbar at the top.

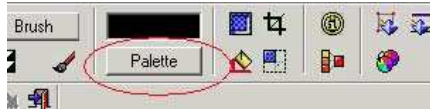


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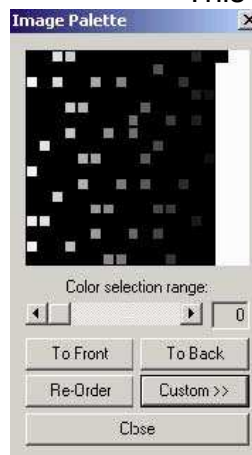
The other way of opening this toolbar is to click on the **Scan Tools** fly out on the left of the screen and then click **Accuscan**.



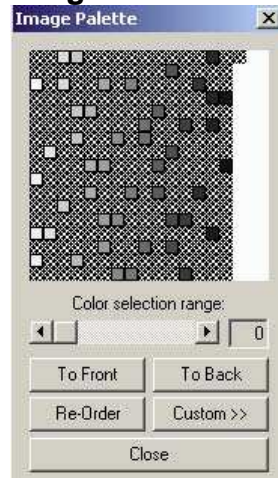
Now that you have successfully opened the **Accuscan** toolbar, you will want to select **Palette**.



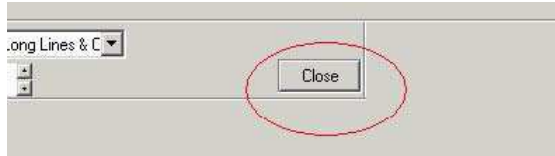
This brings up the **Image Palette** dialog box



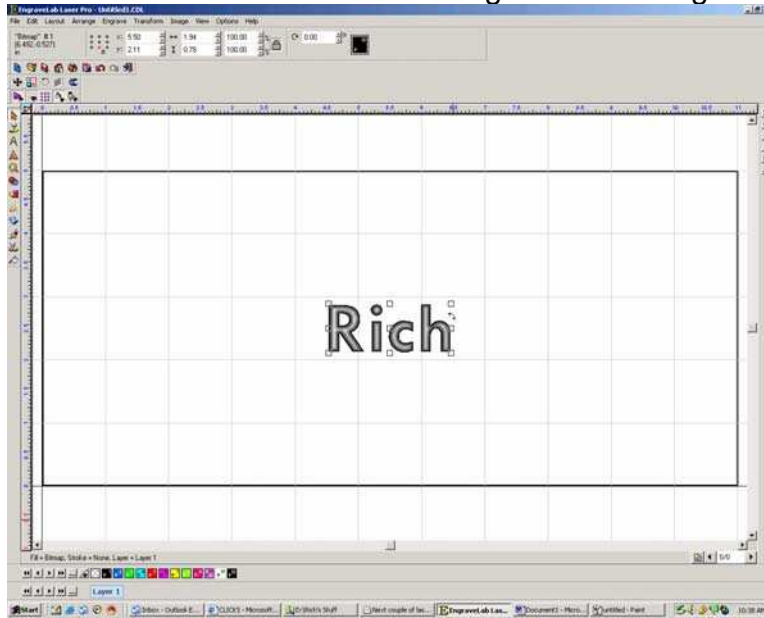
The following step is to select the black color in the top left of the **Image Palette** while holding down **Ctrl**.



Now click **Close**. Then click Close on the **Accuscan** toolbar.



Notice the change in the writing?

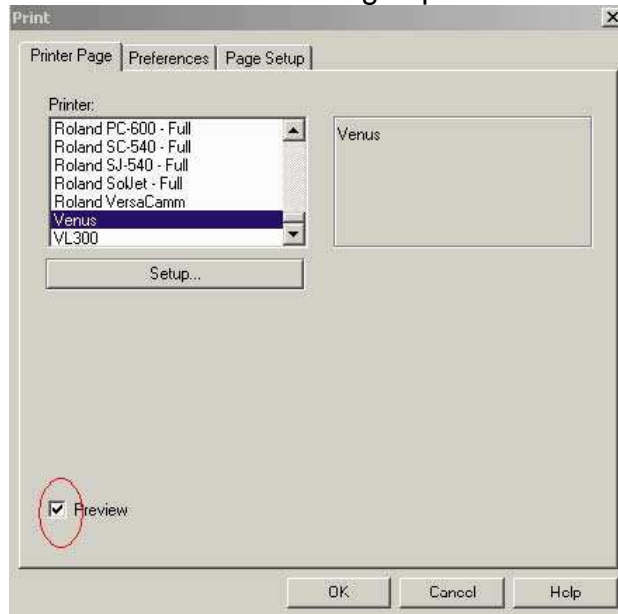


Before printing you will want to make sure that the **Show Reduced Bitmap** is disabled. You are now ready to setup the print job. From **File**, click on **Print**.

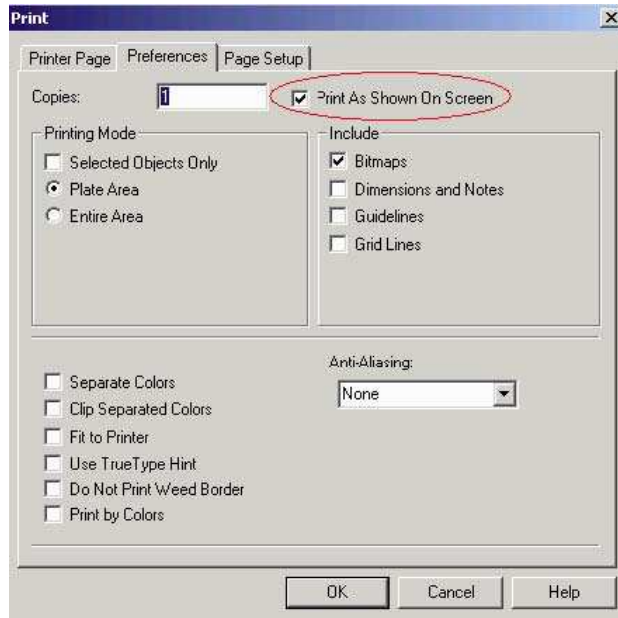




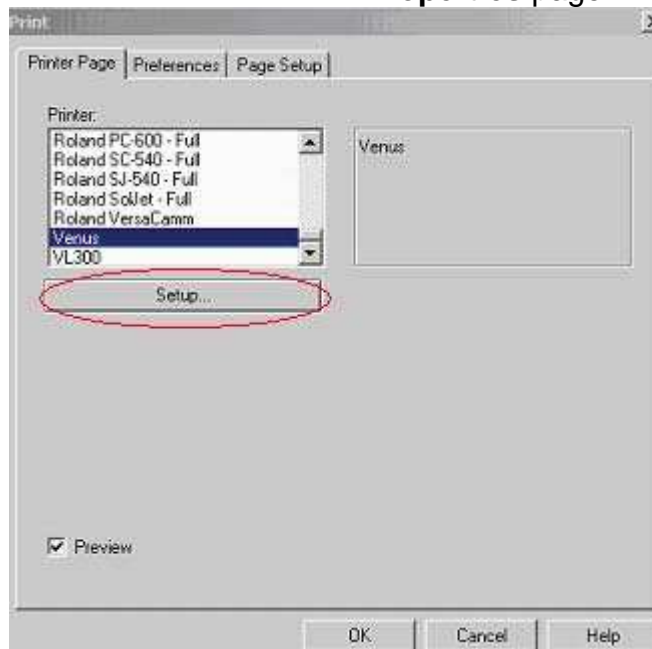
This brings up the **Print** dialog box.

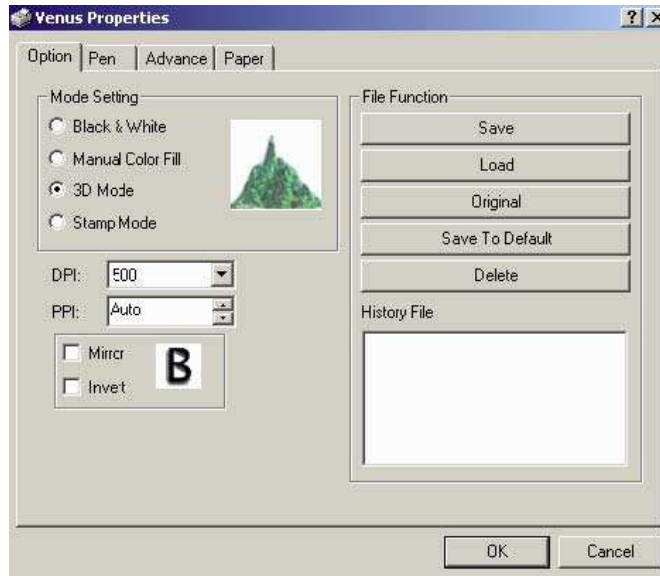


This tutorial is similar to the previous in that you want to make sure that **Print Preview** is on (see above), you also want to make sure that **Print As Shown On Screen** is selected. It is located under the bookmark **Preferences**.

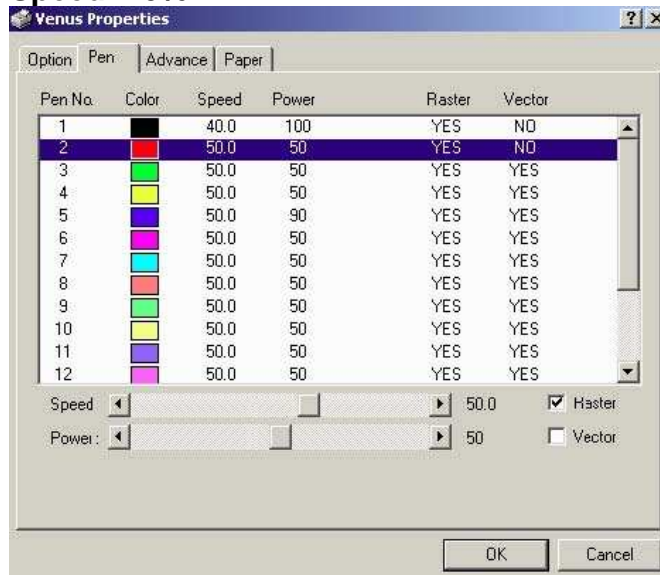


Now that you have set up the printing preferences, you will want to make some adjustments to the printer. To do this you will want to click on the **Printer Page** bookmark. Then you will want to find your printer in the list and click on **Setup**. This takes you to the **Printer Properties** page.



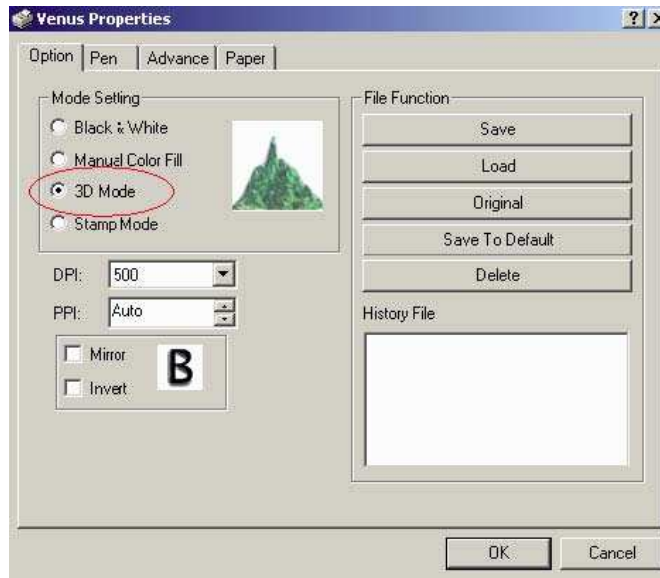


We will want to check the pen settings. To do this, click on the **Pen** bookmark. Remember that the default settings for both speed and power are 50%. In this example we are using one color, black. We are going to adjust the pen settings to **Power=100%** and **Speed=40%**.

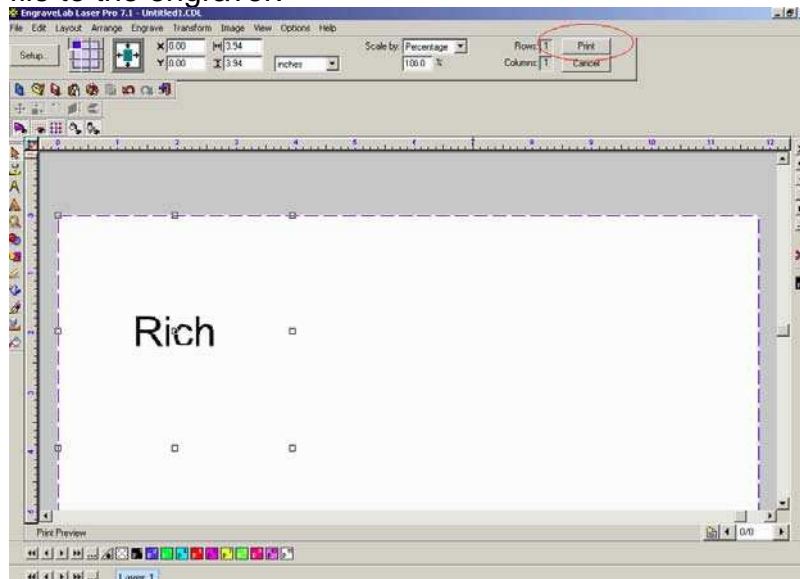


One of the last things you want to change is the **Mode Setting** under the **Option** bookmark of the **Printer Properties** dialog box. Make sure that you select the **3D Mode** option.

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Click **OK** to return to the **Print** dialog box. Click **OK** again. **You** should now be viewing the **Print Preview** page. Click **Print** to send file to the engraver.



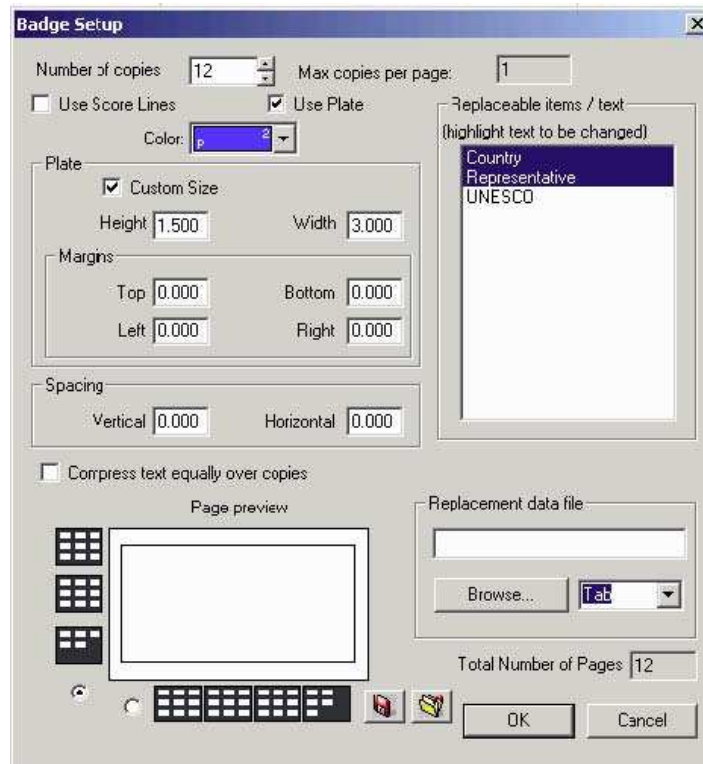
Creating a Single Badge per Plate

In the previous lesson, *Creating a Multi-line Plate*, text was arranged on a multi-line plate. Using that lesson as a basis, the plate will be used to create a series of badges, where there will be a single badge per plate.

Note: In the previous lesson, *Creating a Multi-line Plate*, the multi-line plate was stored as a "badge.cdl" file, and badge replacement text was stored as a "MemberStates.txt" file. Both files will be referred to within this lesson

Initial Badge Setup

- A) From the **Edit** menu, choose **Select All**. The text will now be selected.
 B) From the **Layout** menu, choose the **Badges** item. The **Badge Setup** dialog will open.



- C) Set the **Number of copies** field to twelve.
 D) Enable the **Use Plate** option. If the **Use Plate** option is already enabled, then disable it and then enable it again. The **Page preview** will now show as a single, white badge, as opposed to multiple badges arranged on a single plate.

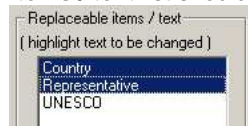
Note: Now that the **Use Plate** option is enabled, each badge will be generated on a single plate.

- E) Notice that the **Plate** fields, **Height** and **Width**, have been set to the dimensions of the sign plate. These settings are fine.

F) The **Margins** may be set, but this example will simply values of zero for **Top, Bottom, Left, and Right**. G) Verify that the **Compress Equally Over Copies** option is unchecked.

Set Replacement Text

H) In the **Replaceable items / text** list, click the first line of text ("Country"). Then while pressing the **[Ctrl]** key, click the second line of text ("Representative"). The **Replaceable items / text** list should appear as follows:



Note: The **Replaceable items / text** are arranged according to their database order (i.e. the order in which they were created on the workspace).

I) Within the **Replacement data file** section, click the **Browse** button. The **Browse** dialog will open.

J) Using the **Browse** dialog, locate the "MemberStates.txt" file that was previously created. Select the file and click **Open**. The **Badge Setup** dialog will indicate that the file has been selected.



K) To the right of the **Browse** button, verify that the drop-list has been set to "Tab".

Text Substitution

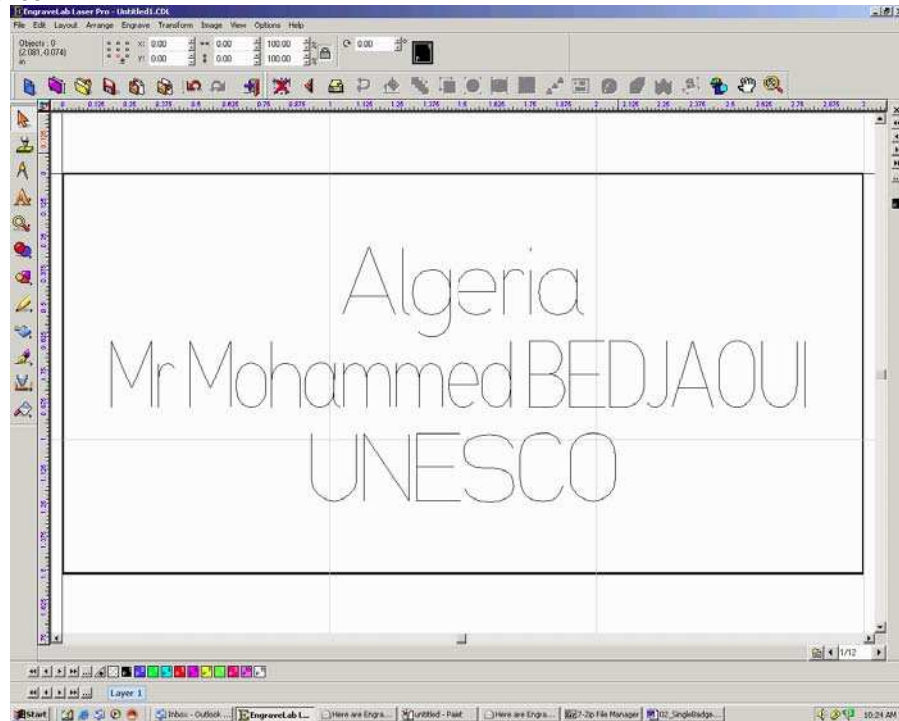
L) Click **OK** to close the **Badge Setup** dialog, and the **Text Substitution** dialog will open. The twelve entries from the "MemberStates.txt" file will be displayed.



M) Click **OK** to accept the **Text Substitution** fields, and Vision Pro will proceed to create the badges.

The Finished Badges

When the badges have been completed, the workspace will display the first badge in the series.



The Paging Tool

To view the remaining badges, use the **Paging Tool** that is at the bottom-right corner of the workspace. Click the **Forward** and **Back** navigation buttons to access the other badges.



The **Advance** button will advance the view to the next sign plate display.



The **Rewind** button will move the view to the previous sign plate display.



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Creating Multiple Badges per Plate

In the previous lesson, *Creating a Multi-line Plate*, text was arranged on a multi-line plate. Using that example as a basis, the plate was used to create a series of badges, where there was a single badge per plate.

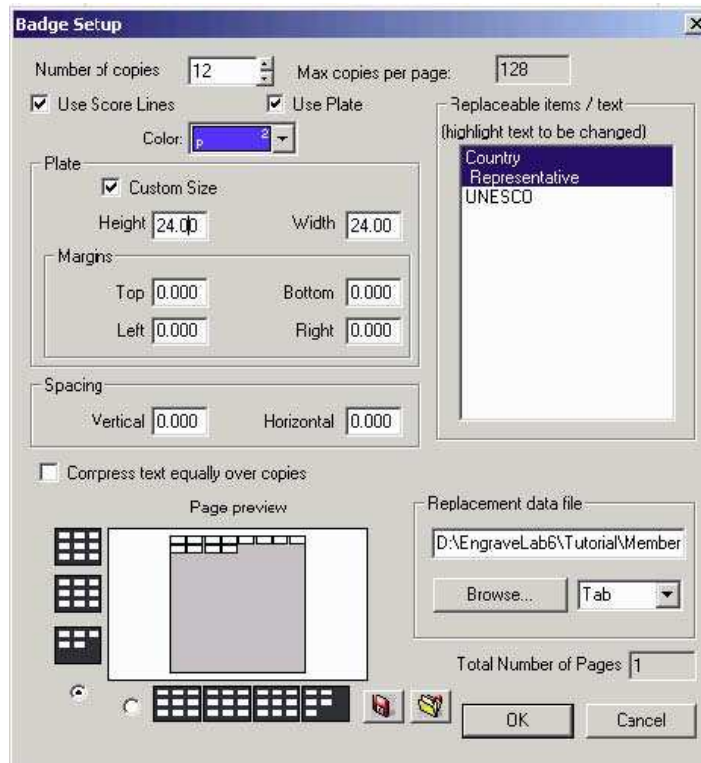
In this lesson, the plate text will be used to create a series of badges, except that multiple badges will be arranged on a single plate.

Note: In the lesson, *Creating a Multi-line Plate*, the multi-line plate was stored as a "badge.cdl" file, and badge replacement text was stored as a "MemberStates.txt" file. Both files will be referred to within this lesson.

Initial Setup

We will start with the creation of the badges.

- A) In Vision Pro, load the workspace file "badge.cdl" that was created in the previous tutorial section.
- B) From the **Edit** menu, choose **Select All**. The text shapes will now be selected.
- C) From the **Layout** menu, choose the **Badges** item. The **Badge Setup** dialog will open.



D) If the **Use Plate** option is selected, then disable it and then enable it again. Notice that the **Page preview** is now showing as a multiple badges arranged on a single plate.

E) Notice that the **Plate** fields, **Height** and **Width**, have been set to the dimensions of the sign plate. However, this example presumes that a sheet of material (24 inches by 24 inches) has been loaded into the machine. So in the **Badge Setup** dialog, the **Height** field should be 24, and the **Width** field should be 24. The **Page preview** now indicates that there are 58 badges arranged on a single plate.

F) Set the **Margins – Top, Bottom, Left, and Right** to zero.

G) Set the **Spacing – Vertical** and **Horizontal** to zero.

H) Verify that the **Compress Text Equally Over Copies** option is disabled.

I) Enable the **Use Score Lines** option, and set the **Color** drop-list to Blue (P3).

Set Replacement Text

K) In the **Replaceable items / text** list, click the first line of text ("Country"). Then while pressing the **[Ctrl]** key, click the second line of text ("Representative"). The **Replaceable items / text** list should appear as follows:



Note: The **Replaceable items / text** are arranged according to their database order (i.e. the order in which they were created on the workspace).

L) Within the **Replacement data file** section, click the **Browse** button. The **Browse** dialog will open.



M) Using the **Browse** dialog, locate the "MemberStates.txt" file that was previously created. Select the file and click **Open**. The **Badge Setup** dialog will indicate that the file

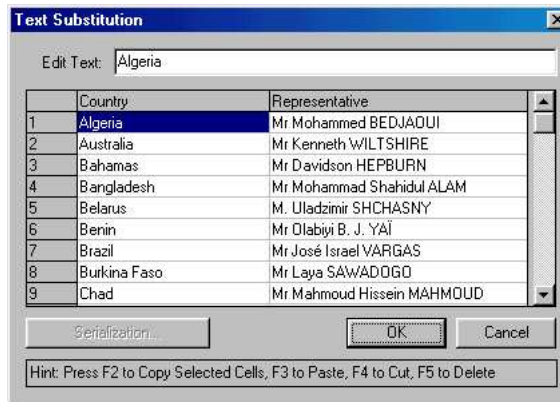
has been selected.



N) To the right of the **Browse** button, verify that the drop-list has been set to "Tab".

Text Substitution

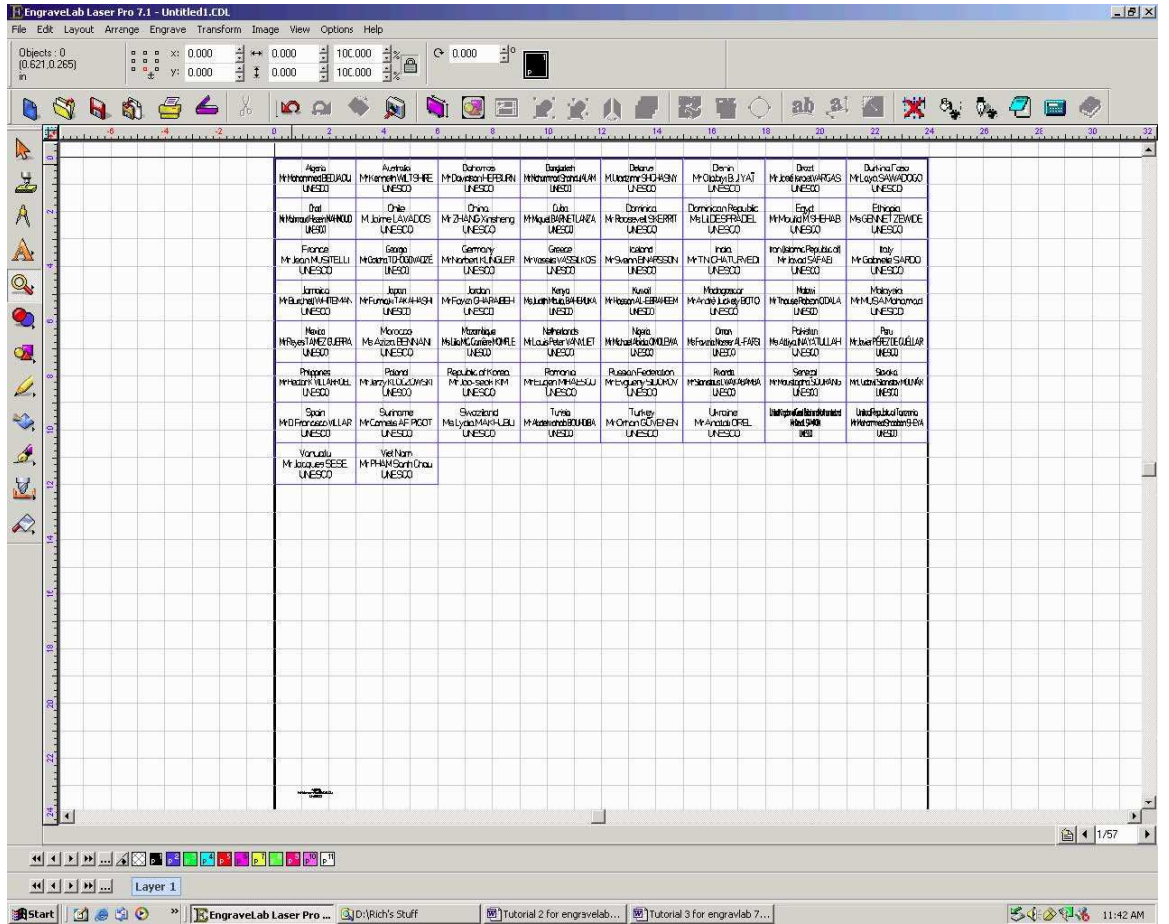
O) Click **OK** to close the **Badge Setup** dialog, and the **Text Substitution** dialog will open. The 58 entries from the "MemberStates.txt" file will be displayed.



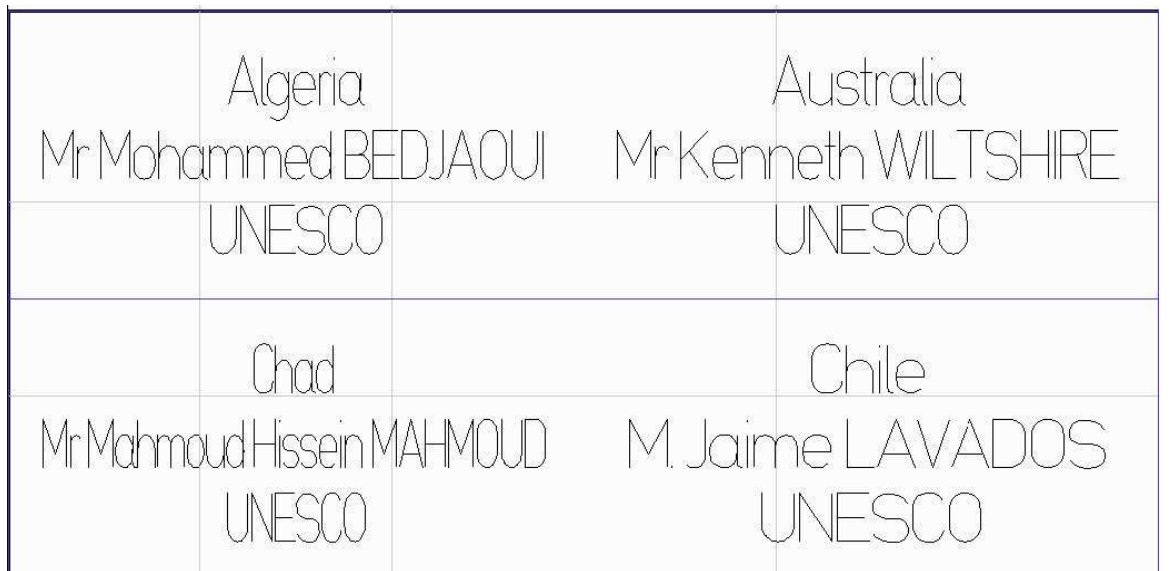
P) Click **OK** to accept the **Text Substitution** fields, and Vision Pro will proceed to create the badges.

The Finished Badges

When the badges have been completed, the workspace will reset the plate size to 24 inches by 24 inches, and the twelve badges will be arranged upon the plate.

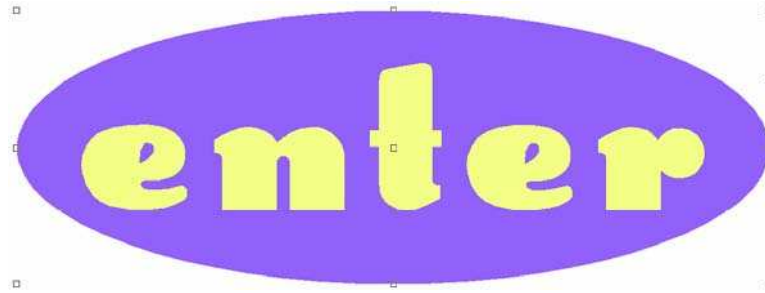


Below is a close up of the badges we just created

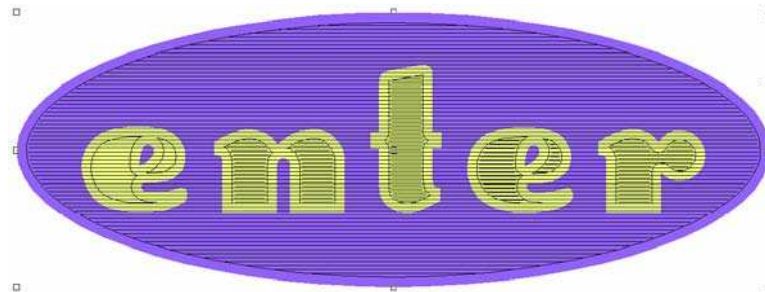


Creating an Engraving Fill for Text and Graphics

For two selected shapes, where one shape has been placed within the other, an engrave fill operation will cause both shapes to be engraved separately. However, by engraving both shapes separately, the fill for the “outer” shape will leave no uncut material for the inner shape. For example, suppose that the following text and oval shapes were created:



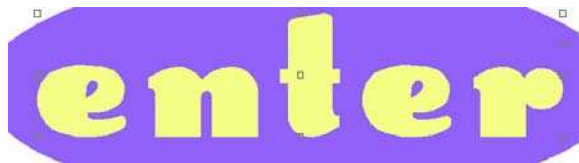
If an engrave fill operation were now applied, then cutting lines will be created for both shapes. However, this is not useful because the entire oval shape will be engraved, which obscures the text.



Use Make Path

Instead of applying the engrave fill to shapes as separate objects, we want to combine the shapes into a single object, which may then be applied with the engrave fill. The **Make Path** command is used to combine shapes, as demonstrated by the following steps:

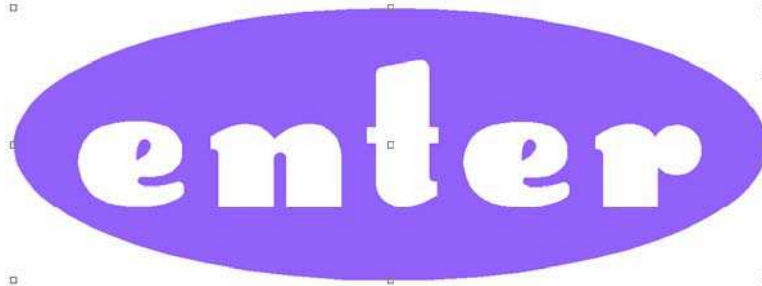
1) Select the text shape, and then choose **Text to Graphics** from the **Arrange** menu. This will also convert the text into individual letter shapes, which is a prerequisite for using the **Make Path** command.



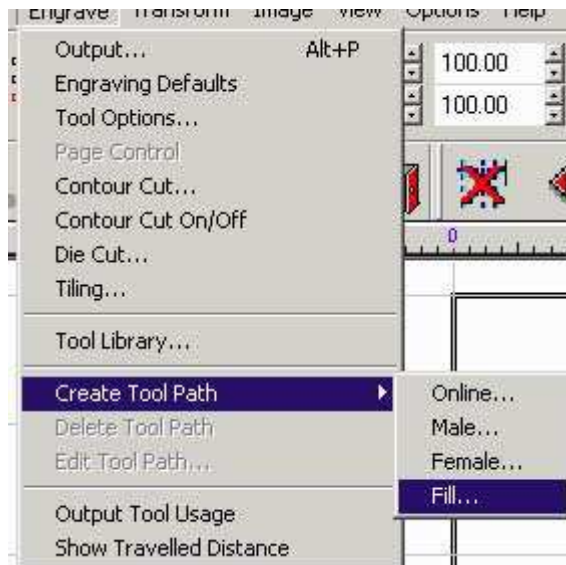
2) Choose **Select All** from the **Edit** menu, such that both the letter and oval shapes are

selected.

- 3) Choose **Make Path** from the **Arrange** menu. The letter and oval shapes will be combined into a single object.

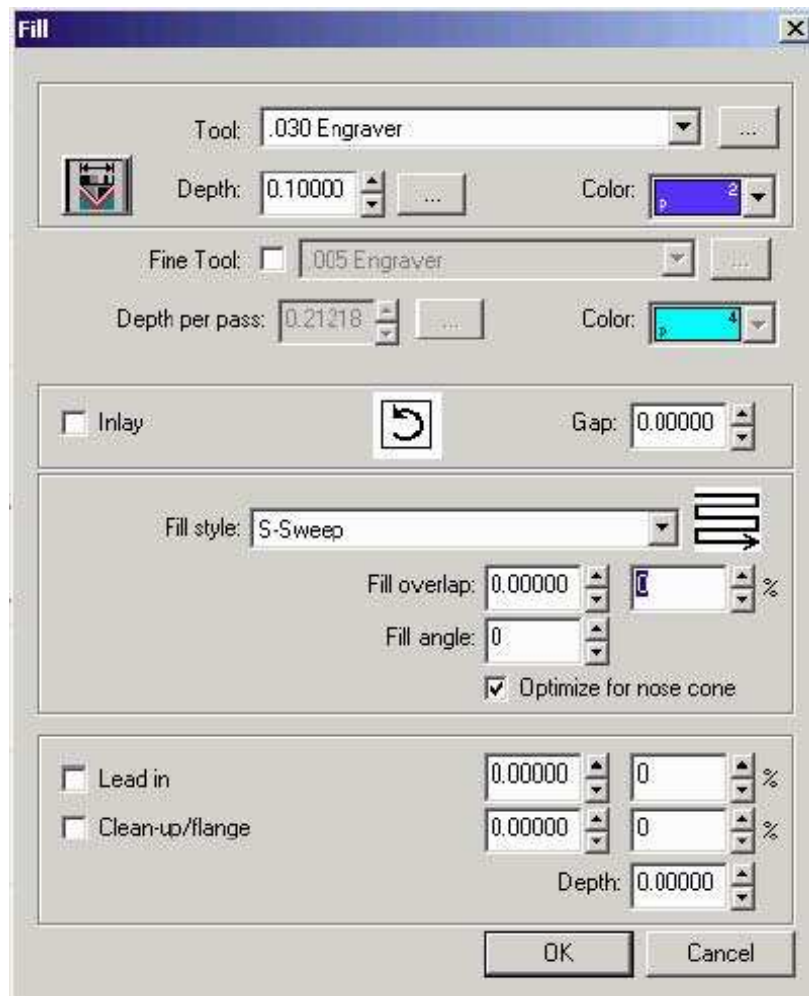


- 4) With the combined object selected, choose **Fill** from the **Create Tool Path** flyout (**Engrave** menu).



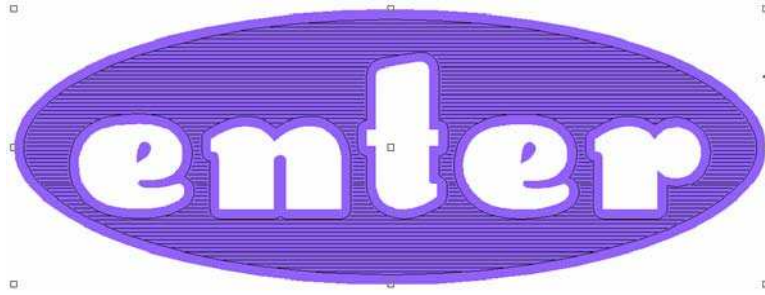
- 5) The **Fill** dialog will open. Set the engrave fill parameters as required for the job. In this example, an S-Sweep style was performed to a Depth of 0.10000" using an 0.030"

Engraver tool.



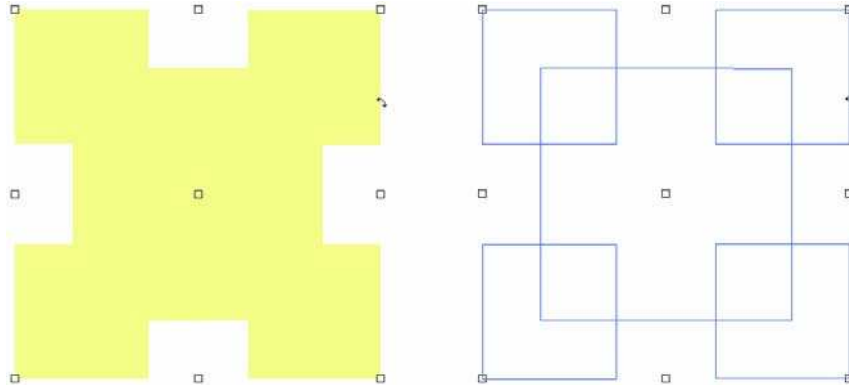
6) Click **OK** to close the **Fill** dialog, and the engrave fill will be applied. The “inner” letter

shapes are not engraved.



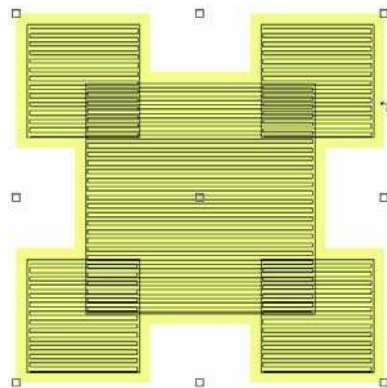
Use Fuse Weld

Where multiple overlapping shapes must be applied with an engrave fill, use the **Fuse Weld** operation to reduce the number of tool movements. For example, consider five squares that have overlapping one-another:



Five overlapping squares Five overlapping squares – fills turned off

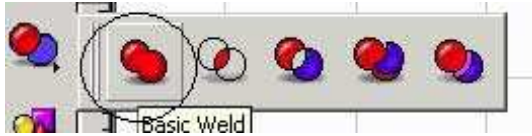
If these squares are selected and an engrave fill applied, then a set of tool path movements are calculated for each square. Unfortunately, this wastes machine time because the tool movements are being duplicated wherever the squares overlap.



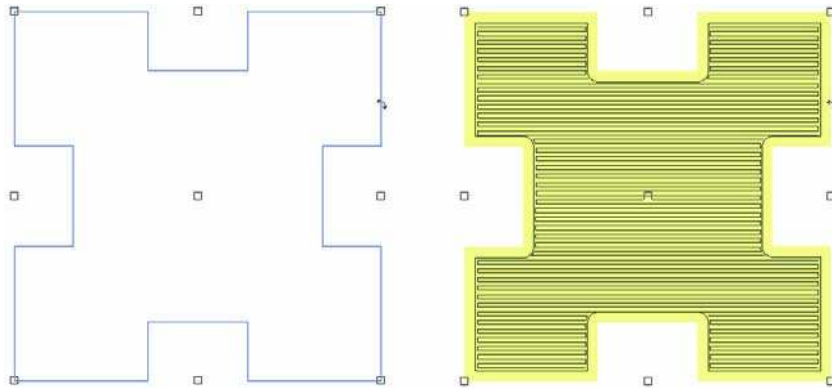
Instead of applying an engrave fill to each square individually, it is more efficient to weld the squares into a single shape. This is demonstrated by the following steps:

- 1) Choose **Select All** from the **Edit** menu, such that all five squares are selected.

- 2) Assign the same fill color to the squares. This will be used later to indicate that a **Fuse Weld** operation be performed.
- 3) From the **Weld Tools** flyout, click the **Basic Weld** button. Since each square has the same fill color, a **Fuse Weld** operation will be performed to weld the squares into a single object.



- 4) With the welded object selected, choose **Fill** from the **Create Tool Path** flyout (**Engrave** menu).
- 5) The **Fill** dialog will open. Set the engrave fill parameters as required for the job. In this example, an S-Sweep style was performed to a Depth of 0.10000" using an 0.030 1/4" Engraver tool. 6) Click **OK** to close the **Fill** dialog, and the engrave fill will be applied.



Welded object with fills off Welded object with engrave fill



Tracing a Monochrome Bitmap

Vision Pro provides bitmap tracing functionality through the AccuScan module. When a bitmap is traced, vector shapes will be constructed that follow the contours of the bitmap. Tool paths may then be applied to the traced contours.

For example, the following steps describe how to trace a bitmap that has been imported into Vision Pro.

Initial Setup

Before beginning the procedure, the following workspace settings were made.

Workspace rulers

The ruler units were set to inches. This was done by left-clicking the ruler.

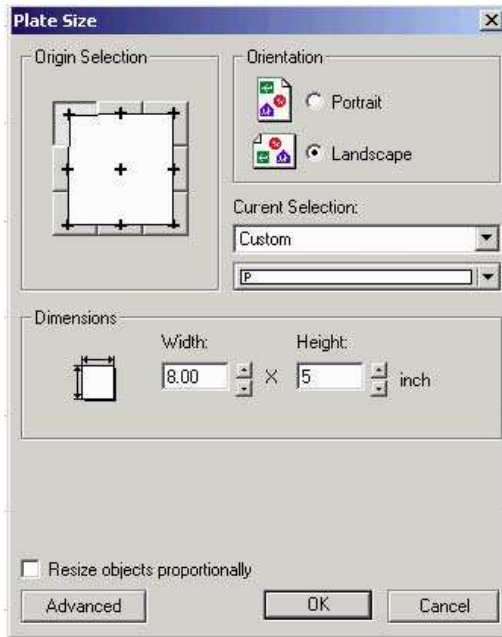


Plate Size

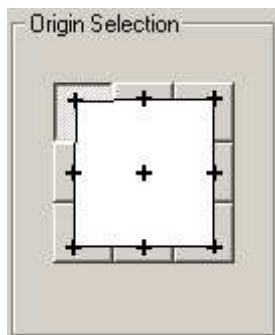
The **Plate Size** was set to the dimensions of one plate. This was done by selecting **Plate Size** from the **Layout** menu and setting the following:

- ⌚ Set **Current Selection** to **Custom**
- ⌚ Set **Orientation** to **Landscape**
- ⌚ Click the upper-left quadrant of the **Origin Selection**
- ⌚ Set **Width** to 8.00 inches
- ⌚ Set **Height** to 5.00 inches

The **Plate Size** dialog should appear as follows:



By clicking the upper-left quadrant of the **Origin Selection**, Vision Pro will use coordinates (0,0) as the upper-left corner of the workspace.

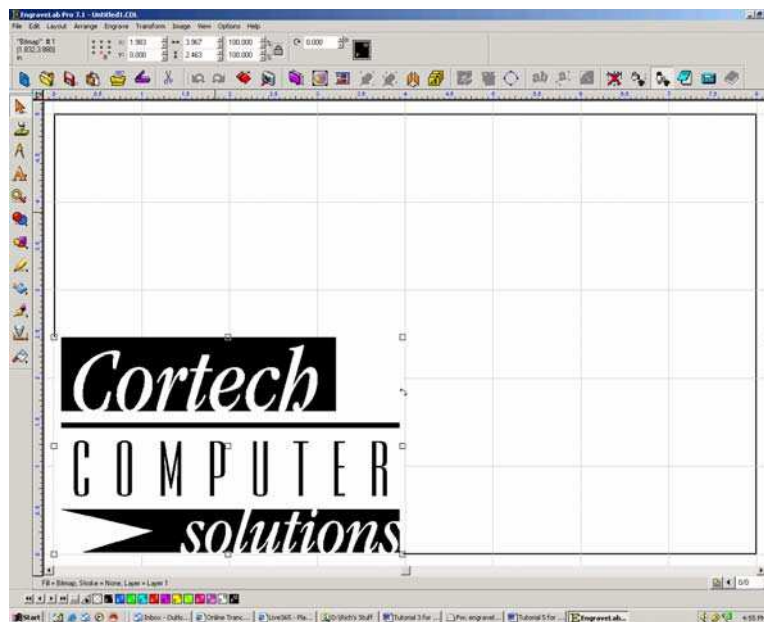


Click the **OK** button to accept the changes, and the view will return to the **Sign Plate**.

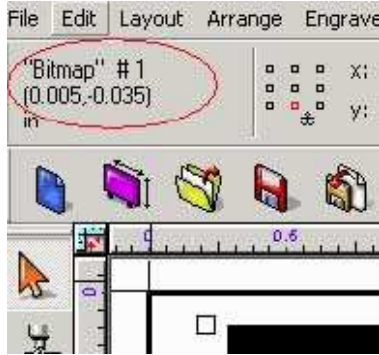
Importing a Bitmap Image

Now that the workspace has been prepared, a bitmap can be imported and scanned.

1. From the **File** menu, choose the **Import** item.
2. The **Import File** dialog will open. In this case, we want to import a TIFF image, so set the **Files of type** drop-list to *TIFF Image Files (*.tif)*.
3. Browse to where the desired image is located, and then double-click to import the image.



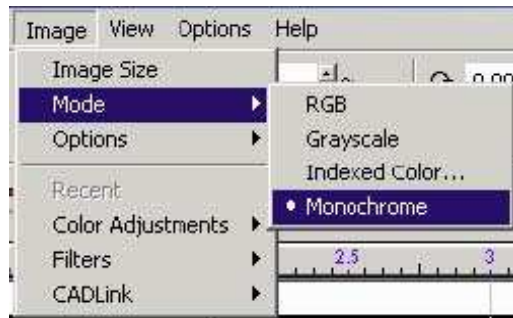
4. After being imported, the image will be selected. Though we had chosen a TIFF image, the SmartBar indicates that the image is a bitmap. This conversion from TIFF to 24-bit bitmap was performed automatically.



Setting a Monochrome Image

In order to scan the image with AccuScan, the image must first be converted into a monochrome image. For our example, the imported image is already monochrome. However, if an RGB image must be converted to monochrome, then perform the following:

1. Make certain that the bitmap is selected. If it is not selected, then either click the image, or choose **Select All** from the **Edit** menu.
2. Once the image is selected, choose **Monochrome** from the **Mode** flyout (**Image** menu).

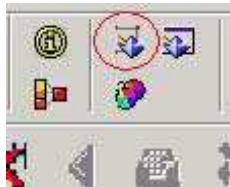
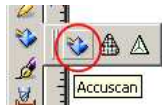


3. The image will now be in monochrome format.

Tracing the Image with AccuScan

The monochrome image is now ready to be traced by AccuScan.

1. With the image selected, choose **AccuScan** from the **Scan Tools** flyout.
2. The **AccuScan** controls will become available within the SmartBar. At the far-right of the SmartBar, the **Vectorization**, **Trace Setup**, and the **Save Settings Controls** drop-list are available.
3. From the **Save Settings Controls** drop-list, choose the "Small Serif Text" item.
4. To begin tracing the image, click the **Vectorization** button. Our sample image is relatively simple, so only a moment will be required to complete the tracing.



5. Once the image trace is complete, click the Close button to close AccuScan and return to the Select state. The trace is now grouped on the workspace.

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Braille

Introduction

The **Braille** module is used to create accurate, ADA-compliant Braille translations. The resulting Braille may then be rendered by means of either engraving, punching or photo-etching.

Braille cannot be modified using the Auto Kern feature. The Braille fonts are carefully constructed to meet the Federally-mandated ADA standard in the United States, and using any special kerning modes (Wide, Narrow, etc.) will cause the text to be non-standard.

Note: The Braille feature is included with the **Braille** module.

Braille font types

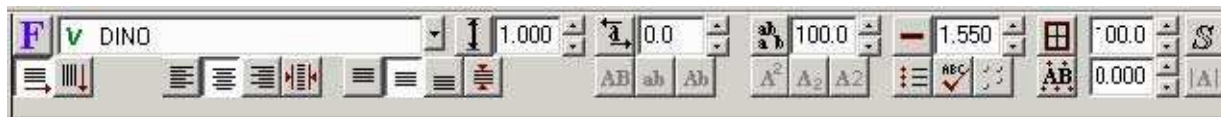
There are four types of CADlink VEF fonts that are used for generating Braille. The following chart indicates where each font is used:

Braille Rendering method	Braille font used
Engrave	brilbox.vef
Punch	brpunch.vef
Photo-resist	brilpho.vef
Pre-bled photo-resist	brilpho1.vef

Creating Braille

To avoid spelling errors, type the initial text using a non-Braille font, and then convert the text into Braille. The typical steps for creating Braille are as follows:

- 1) Choose **Text Compose** from the **Text Tools** flyout, and then click on the workspace to place the text. The **Text Compose** controls will be displayed within the SmartBar.

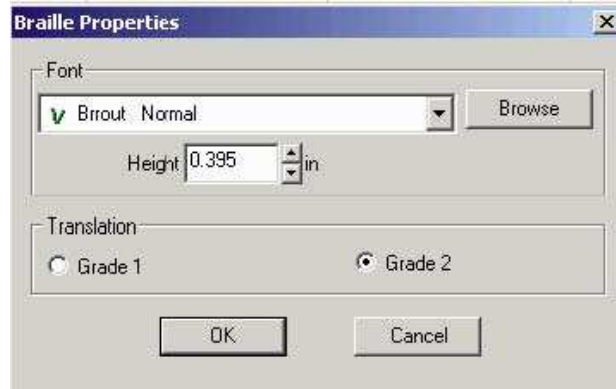


- 2) There are several Braille fonts provided with Vision Pro. To set the default Braille font, right-click the **Braille** button within the SmartBar.

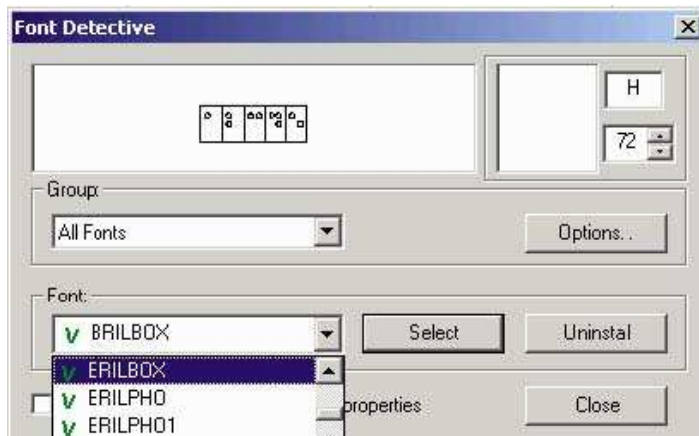


Lesson 6 - Creating Braille

- 3) The **Braille Properties** dialog will open.



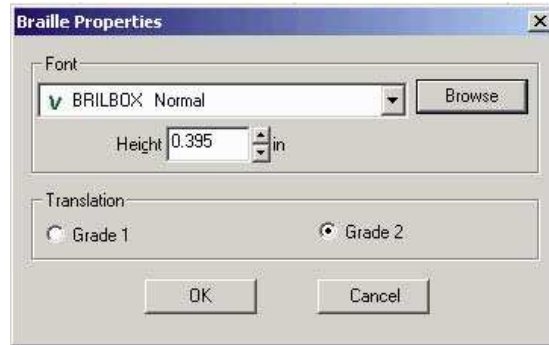
4) Click the **Browse** button, and the **Font Detective** window will open.



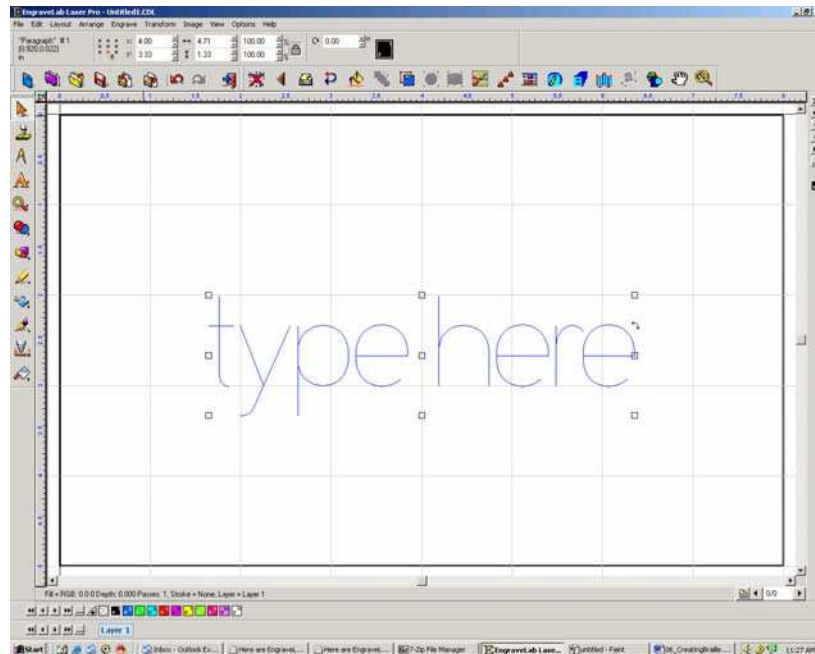
- 5) From the **Font** drop-list, choose the Braille font that will be used. In this case, the `brilbox.vef` engraving font was chosen.

Note: If the required Braille font is not available, then refer to the *Font Installation* section.

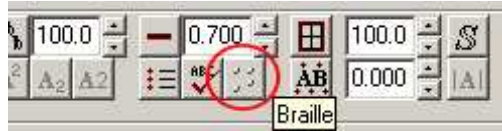
- 6) Click the **Select** button to close the **Font Detective**, and the selected Braille font will become available within the **Braille Properties** dialog.



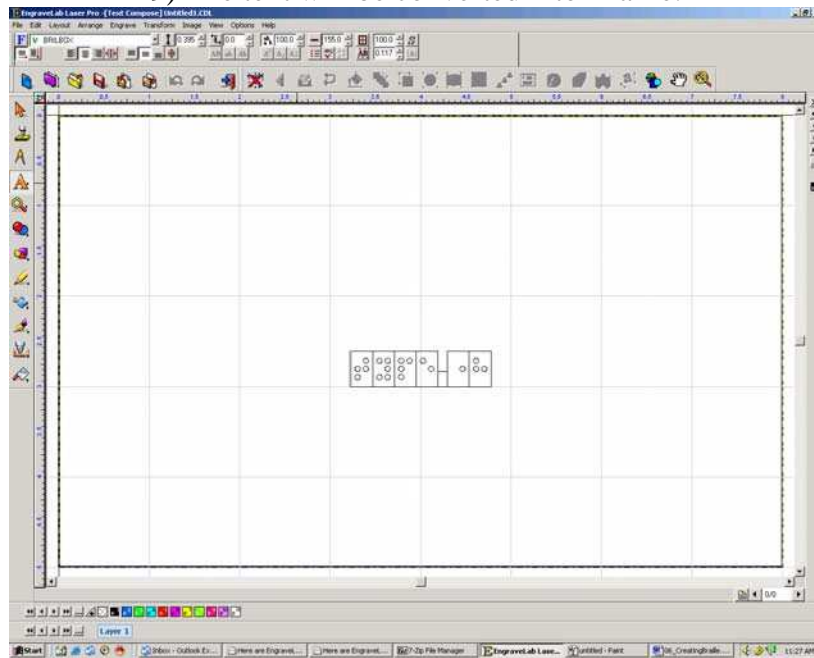
- 7) Click **OK** to close the **Braille Properties** dialog.
- 8) The focus will return to the Vision Pro workspace. Type the text that must be converted into Braille.



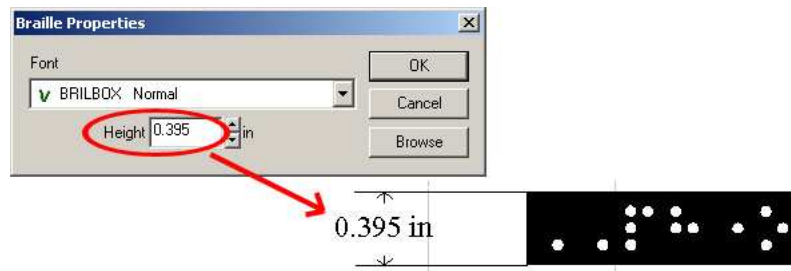
- 8) Within the SmartBar, left-click the **Braille** button.



9) The text will be converted into Braille.



10) To finish text editing, click within an empty portion of the workspace. Note that the height of the Braille is automatically set to 0.395 in, as per the default setting within the **Braille Properties** dialog.



Braille Engrave

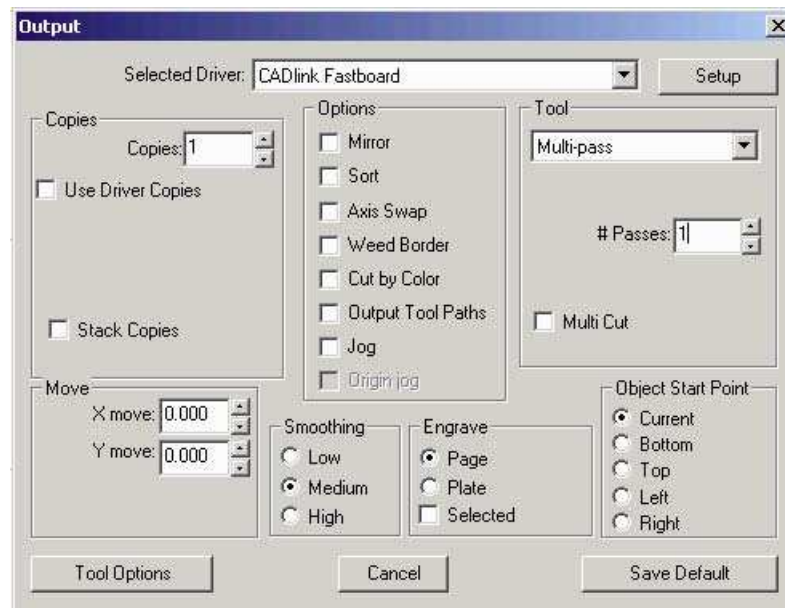
The **Braille Engrave** method is intended for use with a router or engraver. The characters consist of uniform rectangles, which are hollowed out to leave only the dots that distinguish the Braille characters. Use the *brilbox.vcf* font when engraving Braille.

Note: Engraving both Braille and regular text in the same engraving job is not supported. As an alternative, engrave the Braille as a single job, and then engrave the regular text as a follow-up

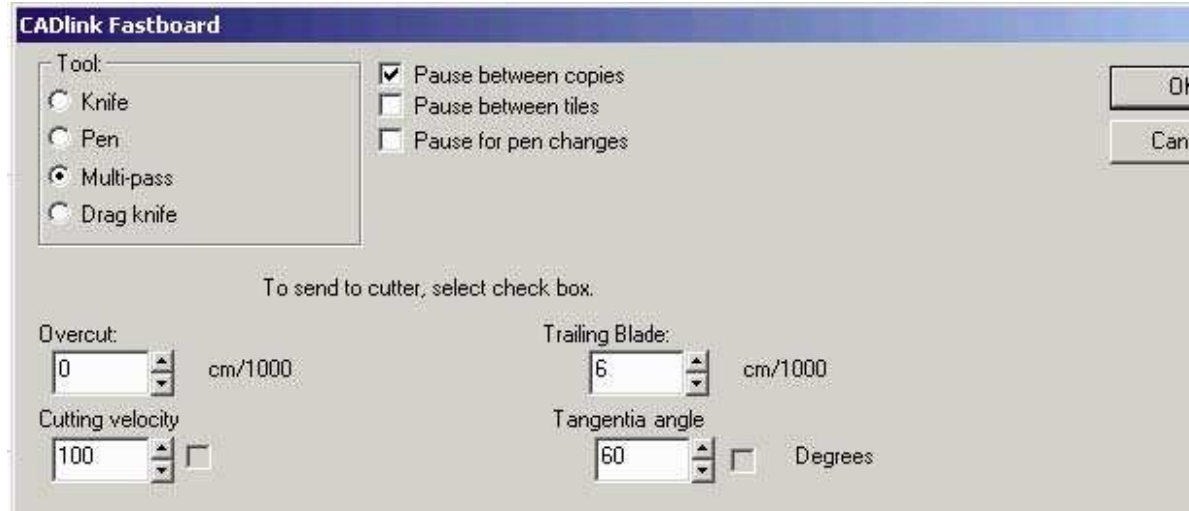
job.

The following steps summarize how to configure a driver to engrave Braille. For a complete description of configuring the **Output** dialog, please refer to the *Cutting and Plotting* section.

- ① Under the **Engrave** menu, choose the **Engraving Defaults** item.
- ① The **Output** dialog will open.



- ① Within the **Output** dialog, choose the **Selected Driver** from the drop-list. This example uses the CADlink Fastboard.
- ① From the **Tool** drop-list, verify that the “Single pass” option is active, or choose Multi-pass and select 1 pass
- ① From the **Options** section, verify that the **Output Tool Paths** checkbox is off. < Click the **Tool Options** button. The **Tool Options** dialog for the **Selected Driver** will open.



- ① From the **Tool** section, verify that the Multi Pass option is selected.
- ② Set the other **Move Control** settings as required.
- ③ Click **OK** to close the **Move Control** dialog. The settings will be automatically saved.
- ④ Back in the **Output** dialog, click the **Save Default** button. The **Output** dialog will close, and the current driver

settings will be stored for future sessions.

The **Output** dialog will close, and the driver is now configured to **engrave** Braille.

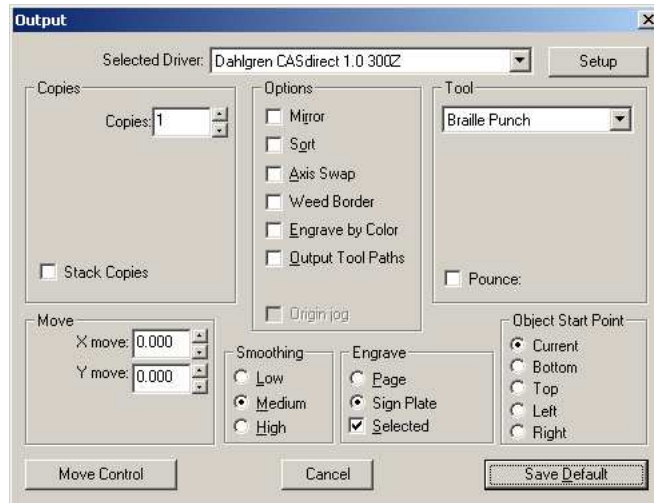
Lesson 6 - Creating Braille

Braille Punch

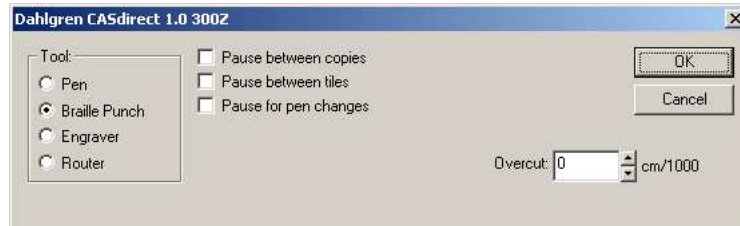
The **Braille Punch** method uses a mechanical punch, where the Braille lettering is punched onto the underside of a plastic sheet. The Braille will then be readable on the topside of the plastic sheet. When the Braille is punched, the lettering is automatically mirrored, such that the topside of the plastic sheet will be readable. Use the *brpunch.vef* font when punching fonts.

The following steps summarize how to configure a driver to punch Braille. For a complete description of configuring the **Output** dialog, please refer to the *Cutting and Plotting* section.

- ① Under the **Engrave** menu, choose the **Engraving Setup** item. The **Output** dialog will open.



- ① Within the **Output** dialog, choose the **Selected Driver** from the drop-list. This example uses the *Dahlgren CASdirect 1.0/300Z* driver.
- ① From the **Tool** drop-list, verify that that the “Braille Punch” option is active.
- ① From the **Options** section, verify that the **Output Tool Paths** checkbox is off.
- ① Click the **Move Control** button. The **Move Control** dialog for the **Selected Driver** will open.



- ① From the **Tool** section, verify that the **Braille Punch** option is selected.
- ① Set the other **Move Control** settings as required.
- ① Click **OK** to close the **Move Control** dialog. The settings will automatically be saved.
- ① Back in the **Output** dialog, click the **Save Default** button. The **Output** dialog will close, and the current driver

settings will be stored for future sessions.

The **Output** dialog will close, and the driver is now configured to **punch** Braille.

Braille Photo-Resist

The **Braille Photo-Resist** method is designed for printing onto a transparency. The transparency may then be used as a mask to expose photo-sensitive material to ultraviolet light, thereby constructing the dots that compose the Braille lettering. Use the *brilpho.vef* font for designing a transparency mask.

Braille Pre-Bled Photo-Resist

The **Braille Photo-Resist** method may in some cases produce dots that are larger than the acceptable standard for Braille lettering. The **Braille Pre-Bled Photo-Resist** method corrects this problem by resizing the *brilpho.vef* font to compensate for dot sizes that are too large. In this case, use the *brilpho1.vef* font for designing a transparency mask.





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Setting up a Braille Drill Job

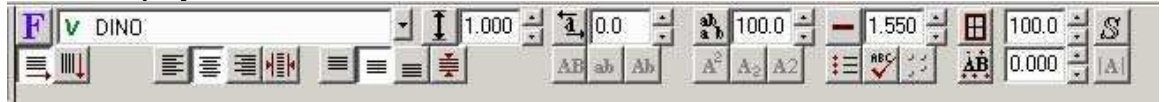
In this lesson, the steps to setup a Braille Drill job will be described. After setting up the default Braille font, an example of converting a line of text to Braille will be described. The final step is a basic description of how to setup an engraving driver to drill Braille dots.

Setting up a default Braille font

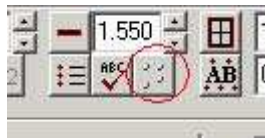
The first step is to setup the proper default Braille font. Start by choosing the **Text Compose** icon from the **Text Tools** flyout to the left of the workspace.



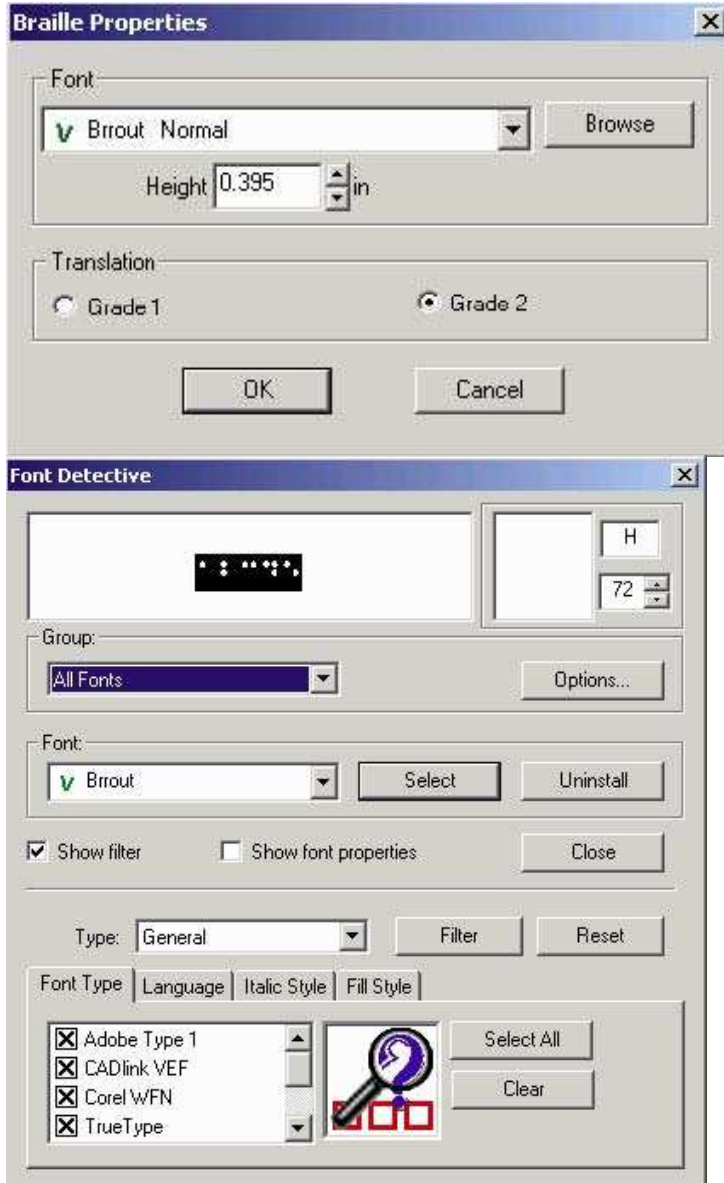
Next, single click within the Plate on screen. The **Text Compose** controls will be displayed in the SmartBar as shown below.



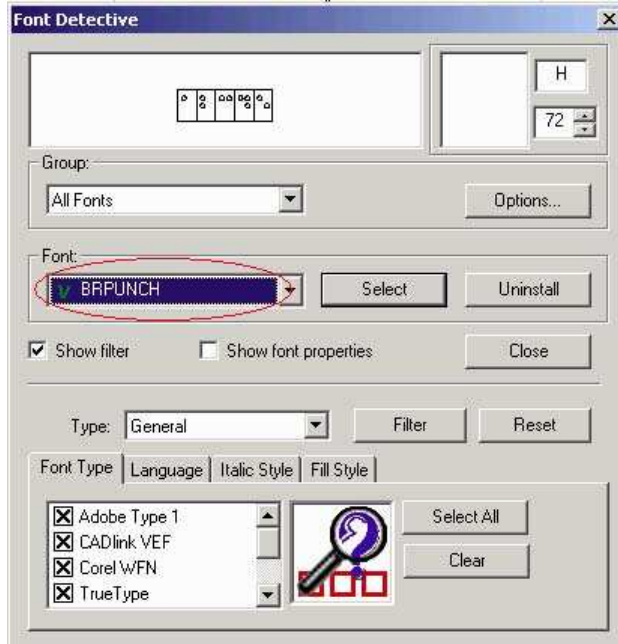
To set the default Braille font, single click with the Right Mouse Button on the **Braille** button



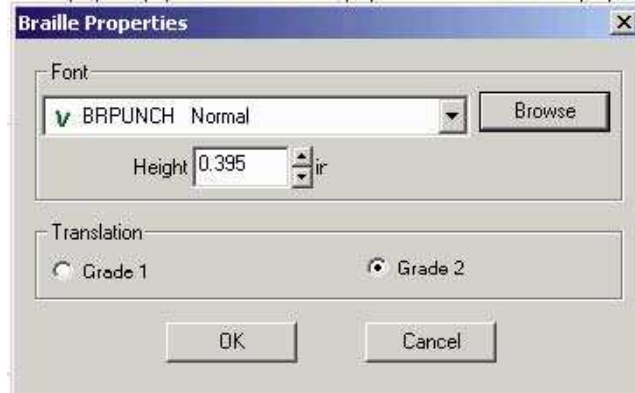
The **Braille Properties** window will open. Click the **Browse** button, and the **Font Detective** window will open.



From the **Font** drop down list, locate the font called BRPUNCH in the Font drop down list.



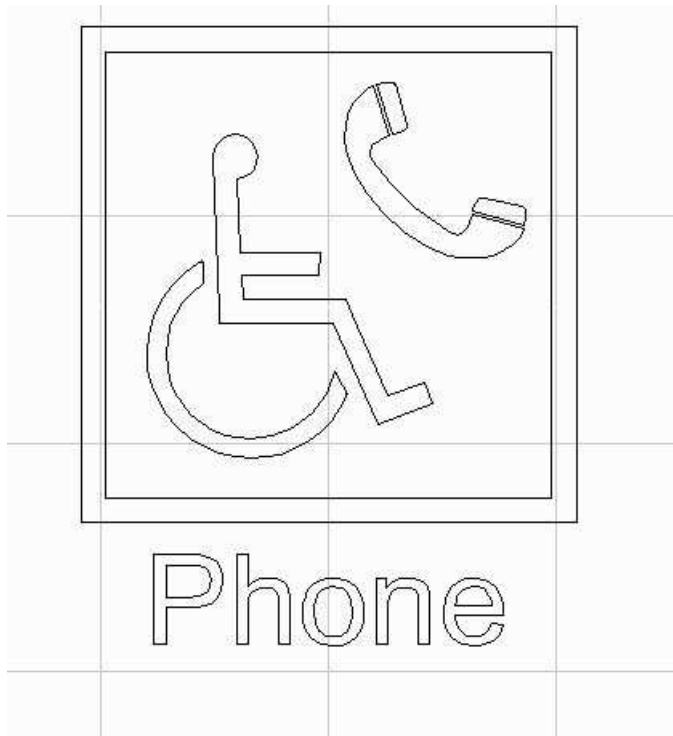
Click the **Select** button to close the **Font Detective**. The selected Braille font will display in the **Braille Properties** window.



Click **OK** to close the **Braille Properties** window. BRPUNCH is now setup as the default Braille font.

Converting a line of text to Braille

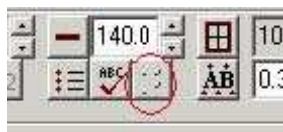
In Vision Pro, open the file called Braille.cdl.



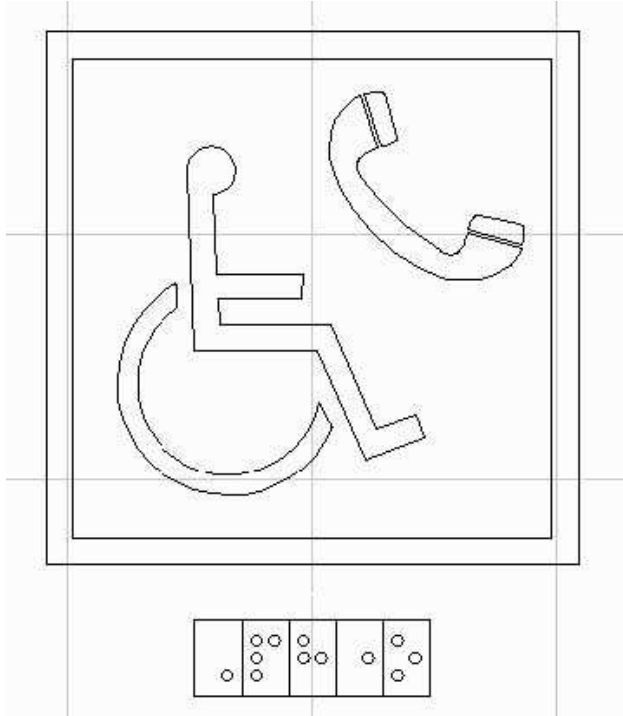
Single click on the word **Phone**. Next click on the **Edit** menu and select **Edit Text**. Note that the Smart Bar should display at the top of the Vision Pro workspace as shown below.



Left-Click on the Braille button.



Vision Pro will convert the selected text to Braille. The resulting plate should look like the following.



How to drill Braille dots on your rotary engraver

The BRPUNCH font is specifically designed to allow a drill operation for every “dot” in a Braille cell. To setup an engraving driver to drill Braille dots, click on the Engrave menu and then Engraving Defaults. The Output window will now open. Select the appropriate driver for your engraver. Once the appropriate driver is selected, click on the Tool option. Select the option called Braille Drill. NOTE that in the case of some drivers, the Tool option is called Braille Punch.



Note that not all engraving drivers have this option. Contact CADlink if the driver you want to use does not include the Braille Drill tool.

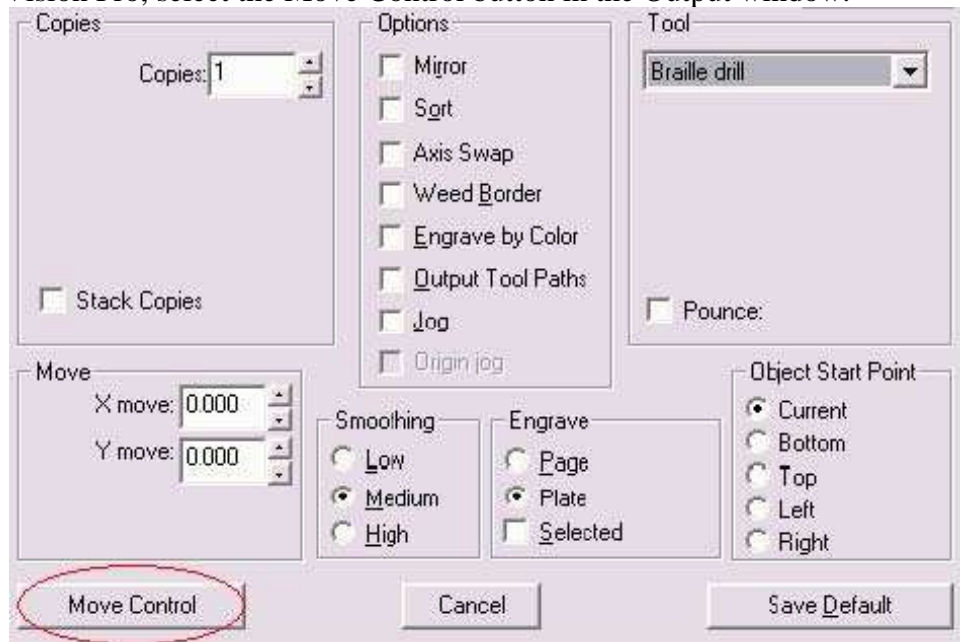
In the Options section of the Output window, make sure that the Output Tool Paths option is DISABLED.



In the Engrave section, make sure that the Plate section is enabled. Enabling the Plate option ensures that the position of the Braille dots as positioned on screen is respected when outputting to the engraving machine.



Certain engraving drivers support setting a depth for the drill operation from Vision Pro. Other drivers expect the depth of the drill operation to be set at the engraver. To set the Depth of the Braille Drill operation from the Vision Pro, select the Move Control button in the Output window.



In the Move Control window for the selected driver, make sure that the Braille Drill tool option is selected. NOTE that depending on the driver that

is selected, the Move Control dialog may or may not look as shown below. However, the principles that are being discussed are still relevant.

Tool:

- Single pass
- Multiple pass
- Braille drill

Pause between copies
 Pause between tiles
 Pause for pen changes

Overcut: 0 cm/1000

XY Max Speed: 50 5-50
Z Max Speed: 30 5-30

Z Depth: 0.00000 in

OK
Cancel

Next, set the Z Depth value to be the desired depth of the drill operation.

Tool:

- Single pass
- Multiple pass
- Braille drill

Pause between copies
 Pause between tiles
 Pause for pen changes

Overcut: 0 cm/1000

XY Max Speed: 50 5-50
Z Max Speed: 30 5-30

Z Depth: 0.2 in

OK
Cancel

Click on the OK button. Then click on the Save Default button in the Output window. You are now ready to send your job to your rotary engraver.

Congratulations on completing the Braille Drill tutorial for Vision Pro V7

Creating Raised Dot Braille Signs

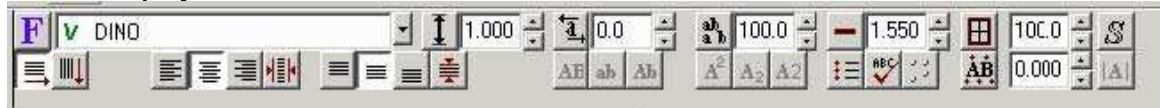
In this lesson, the steps to create a raised dot Braille sign will be described. After setting up the default Braille font, an example of converting a line of text to Braille will be described. The final step is a basic description of how to setup an engraving driver to create raised Braille dots.

Setting up the default Braille font

The first step is to setup the proper default Braille font. Start by choosing the **Text Compose** icon from the **Text Tools** flyout to the left of the workspace.



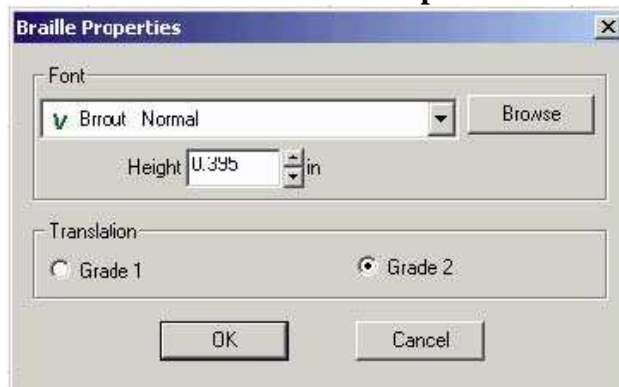
Next, single click within the Plate on screen. The **Text Compose** controls will be displayed in the SmartBar as shown below.



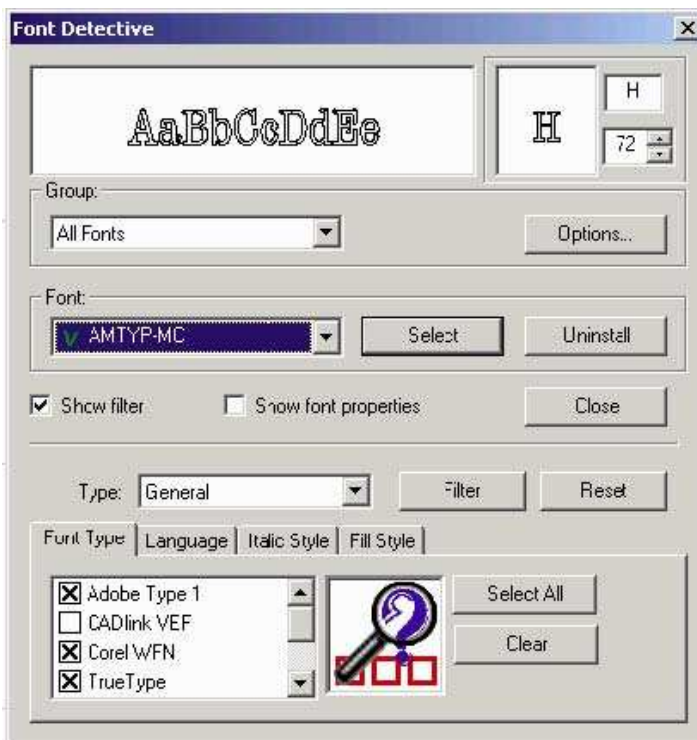
To set the default Braille font, single click with the Right Mouse Button on the **Braille** button



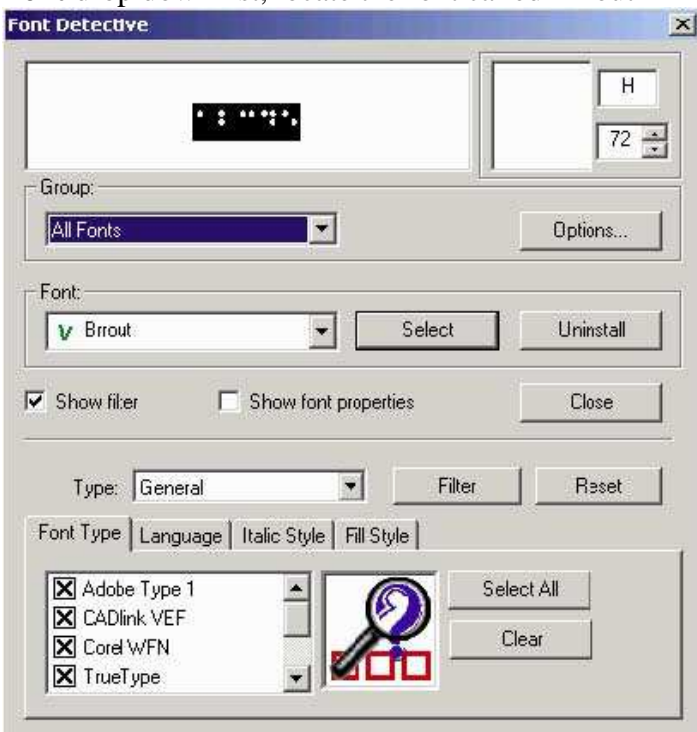
The **Braille Properties** window will open.



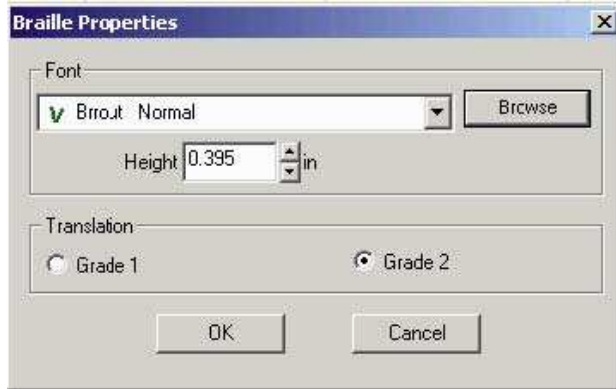
Click the **Browse** button, and the **Font Detective** window will open.



Make sure that the Group drop down list is set to All Fonts. From the **Font** drop down list, locate the font called Brout



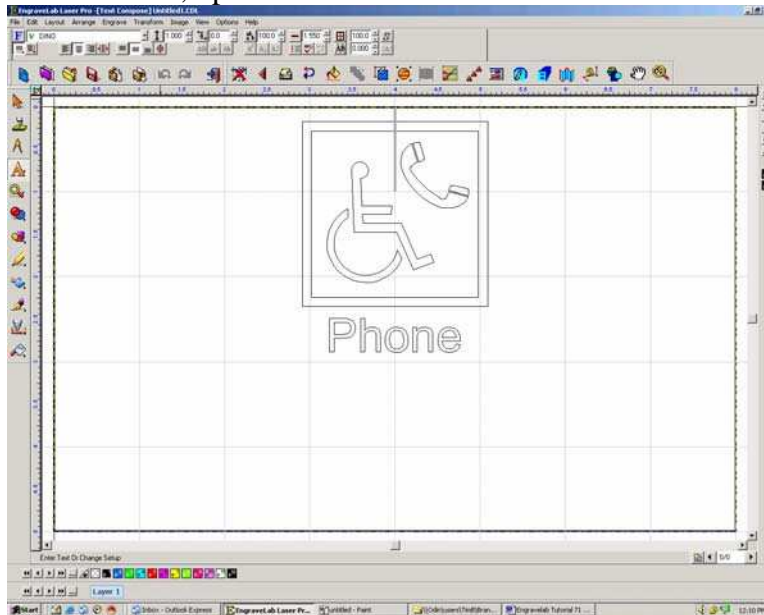
Click the **Select** button to close the **Font Detective**. The selected Braille font will display in the **Braille Properties** window.



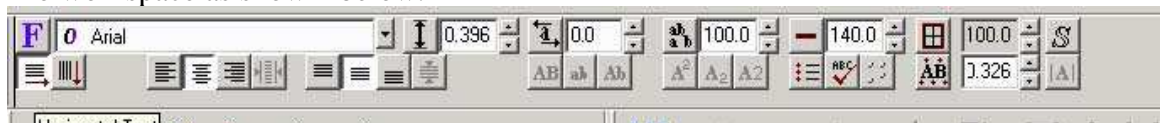
Click **OK** to close the **Braille Properties** window. Brrout is now setup as the default Braille font.

Converting a line of text to Braille

In Vision Pro, open the file called Braille.cdl.



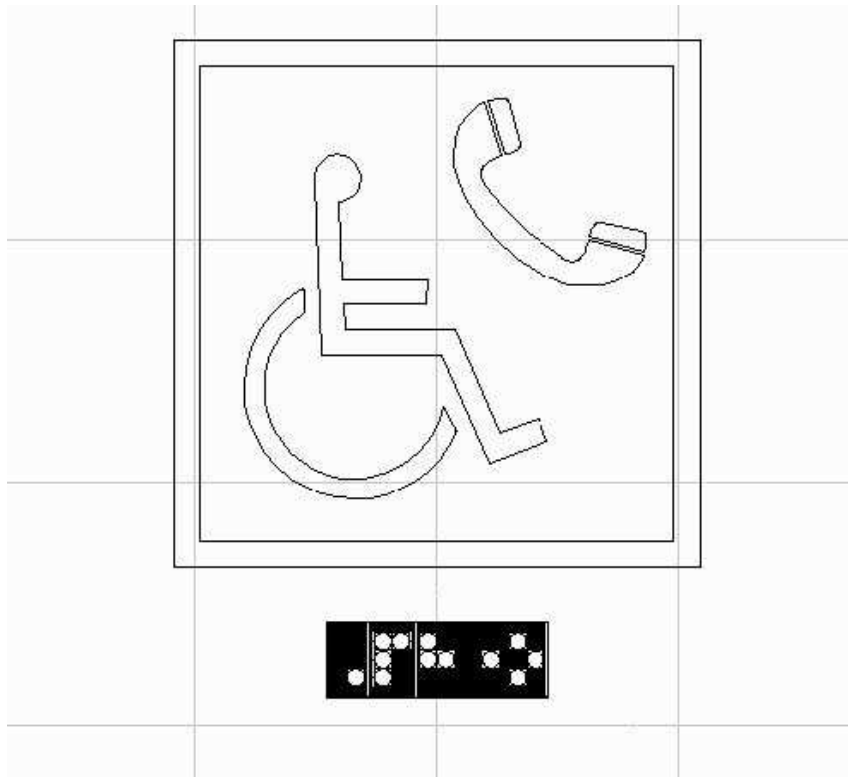
Single click on the word Phone. Next click on the **Edit** menu and select **Edit Text**. Note that the Smart Bar should display at the top of the Vision Pro workspace as shown below.



Left-Click on the Braille button.



Vision Pro will convert the selected text to Braille. The resulting plate should look like the following.



How to create raised Braille dots on your rotary engraver

The Brrout font is specifically designed for routing around every “dot” in a Braille cell using a 0.020 cutting tip. To setup an engraving driver to rout out Braille dots using the Brrout font, click on the Engrave menu and then Engraving Defaults. The Output window will now open. Select the appropriate driver for your engraver. Once the appropriate driver is selected, click on the Tool option. Make sure that the correct Tool option is selected. Typically this option would be set to Single Pass, Multi Pass, Engraver, Router or Controller Depth. Note that not all engraving drivers are setup the same. Contact CADlink if you are unsure of the correct setting.

In the Options section of the Output window, make sure that the Output Tool Paths option is DISABLED.



In the Engrave section, make sure that the Plate option is enabled. Enabling the Plate option ensures that the position of the Braille dots as positioned on screen is respected when outputting to the engraving machine .



Click on Save Default button in the Output window. You are now ready to send your job to your rotary engraver.

Congratulations on completing the Raised Dot Braille Sign tutorial for Vision Pro V7

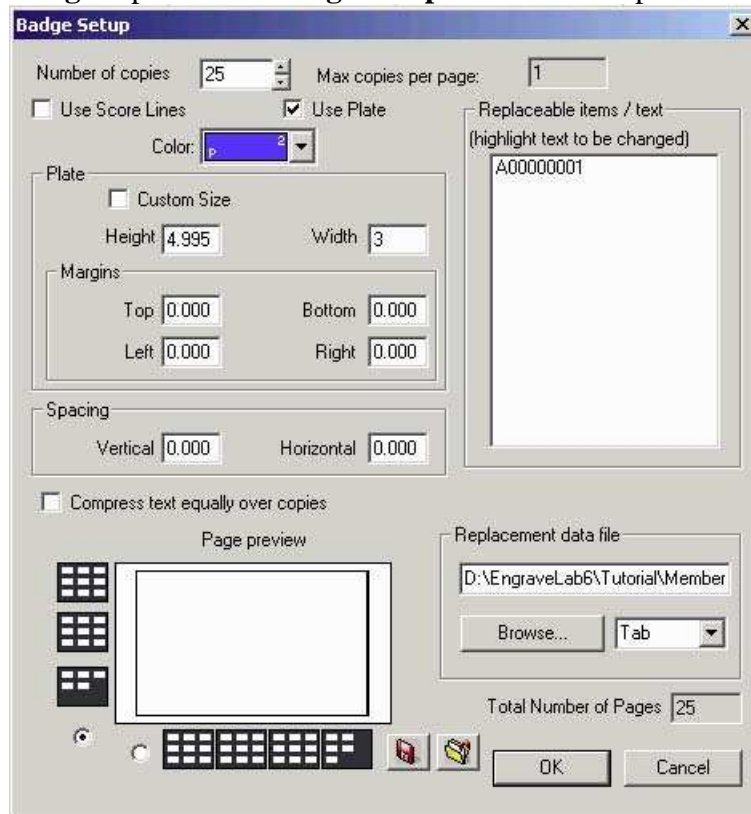


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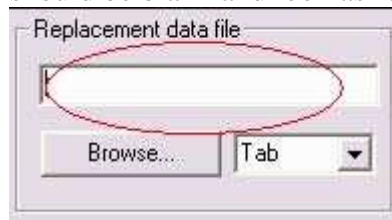
Serialization in Vision Pro 7

In this lesson, a description of how to serialize data for marking parts is described. For the purposes of this tutorial, we will assume that each part will be marked one at a time.

Open the file called `Serialize.cdl`. From the **Edit** menu, click on **Select All**. The text will now be selected. From the **Layout** menu, select the **Badges** option. The **Badge Setup** window will open.



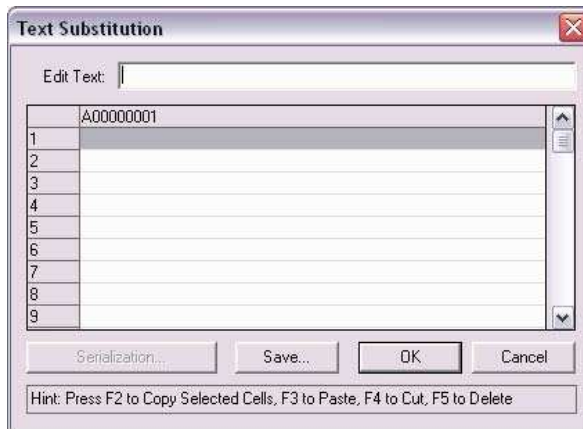
Set the **Number of copies**: option to the desired number of parts that need to be marked. For the purposes of this tutorial, set the number of copies to 25. Make sure that the **Use Plate** option is enabled. As we are marking one part at a time, make sure to disable the **Custom Size** option. The **Width** value should be 3.000 and a **Height** of 1.000. Disable the **Compress Equally Over Copies** option. Make sure that the **Replacement data file** option has no reference to any files – the text field should be blank and look as follows.



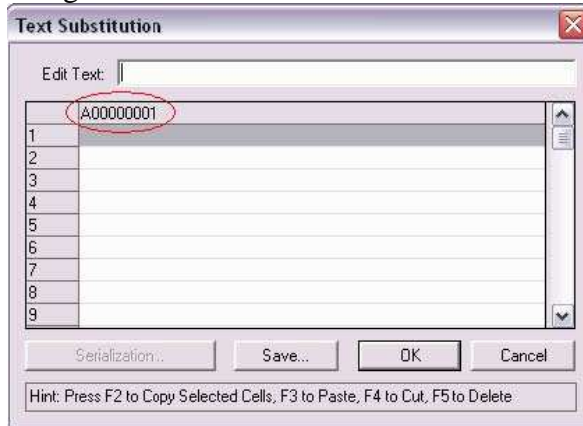
Single click on the text line `A00000001` so that the line is highlighted as shown below.



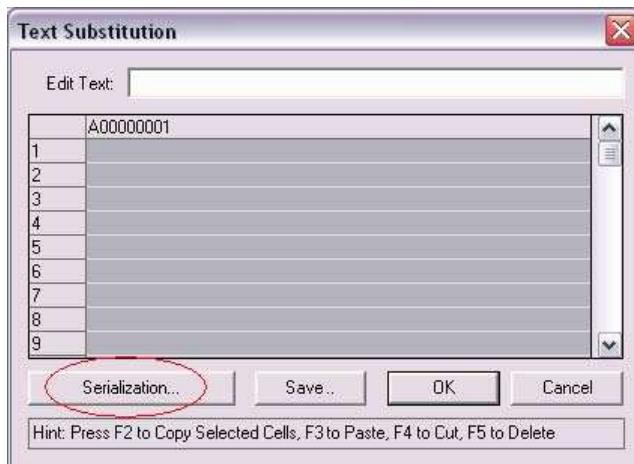
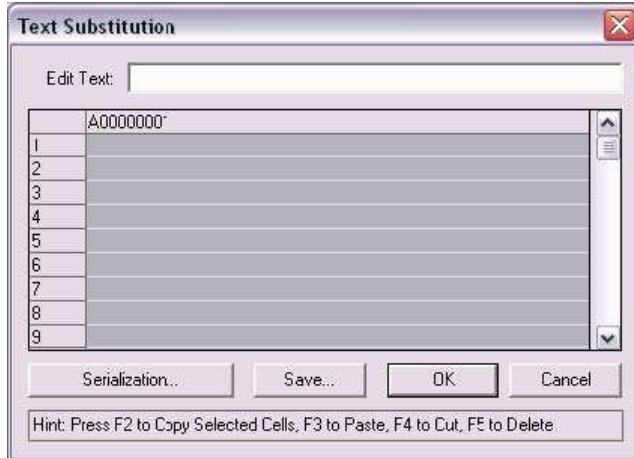
Click on the **OK** button. The next window that opens is the Text Substitution window.



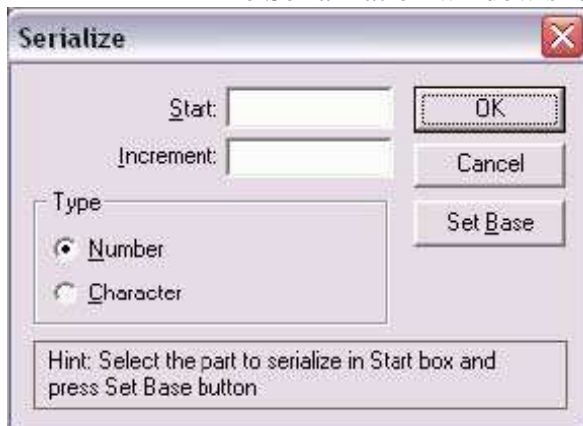
Single click on the Column Header labelled A00000001 as shown below



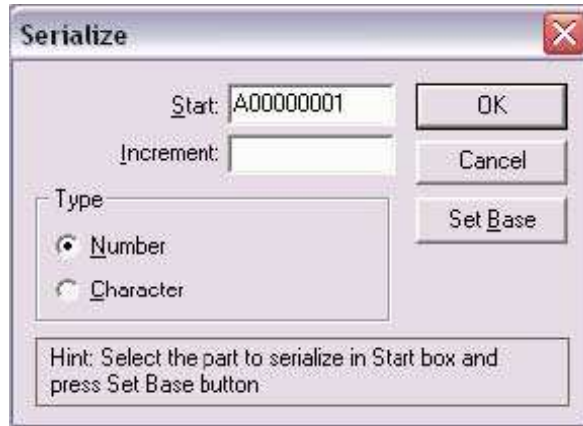
All rows should now be highlighted as shown below Next, click on the **Serialization** button.



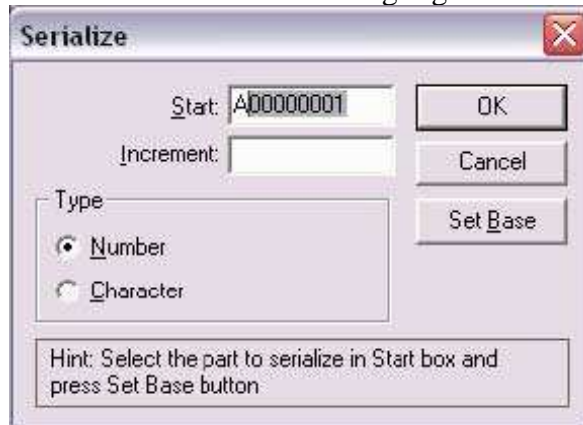
The Serialization window should now open



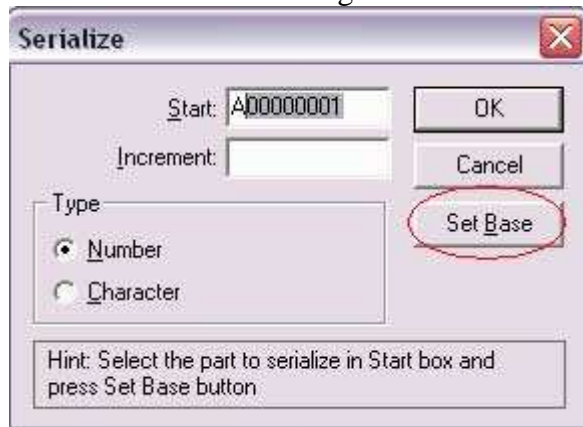
Type in the Start: text edit box A00000001



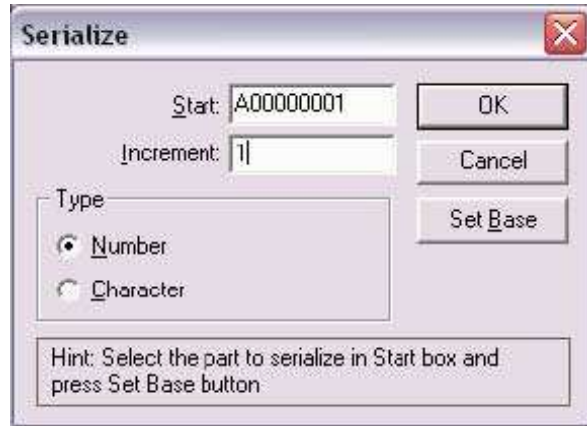
Select the number 00000001 in the Start text edit box. This can be done by sweep selecting 00000001 or by double clicking on the number. In either case the number should be highlighted as shown below.



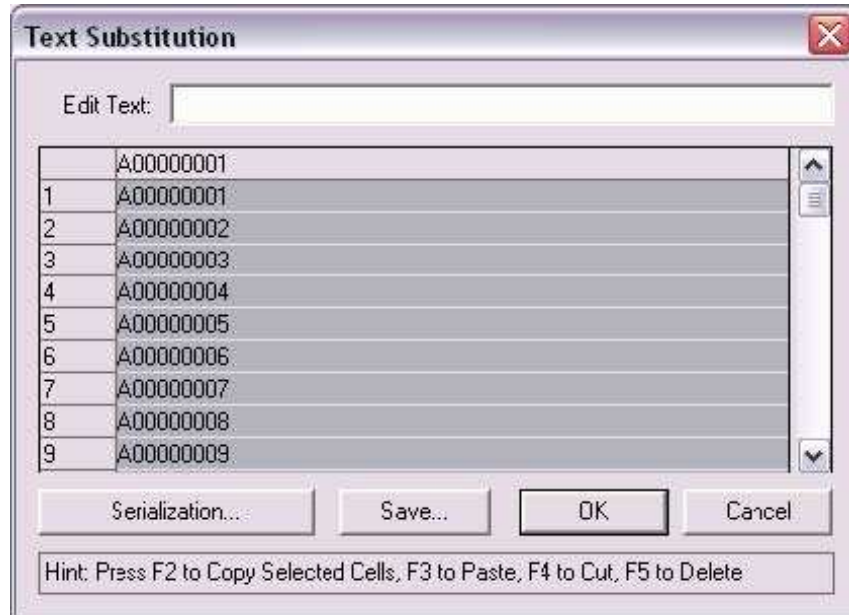
Next single click on the **Set Base** button



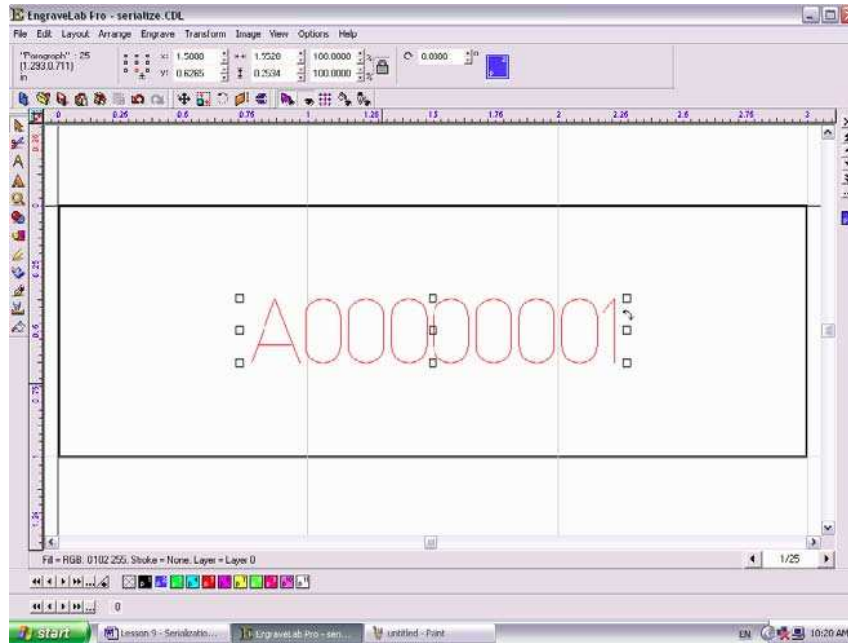
Set the **Increment** number to 1



Select the **OK** button. The next window that will display is the **Text Substitution** window.



Click on the **OK** button. The main Vision Pro window display on screen and should look as follows.



Note in the lower right corner of the Vision Pro window, the **Page Control** option



By single clicking on the **Next Page** control, the serialized data can be previewed.



Congratulations on completing the Serialization tutorial for Vision Pro 7.

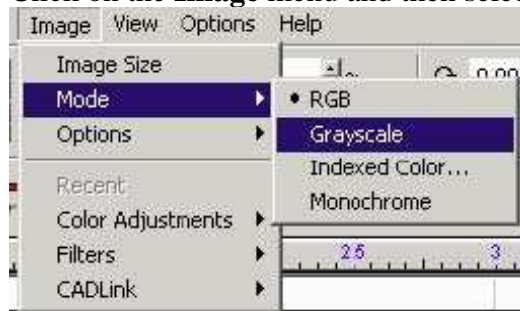
Preparing a Photo for Laser Engraving

The following steps will demonstrate how to prepare a color photograph for laser engraving. First a color photograph will be opened in Vision Pro. Best results are achieved by next converting the color photograph to a gray scale image. Finally a brief description of how to process the gray scale image through the Photo Laser tool will finish the tutorial.

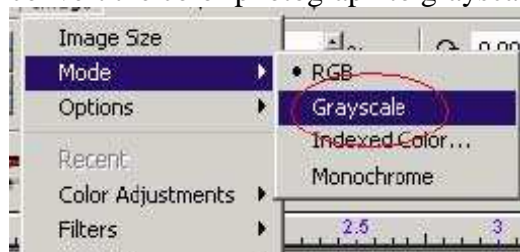
Converting color photos to gray scale images

Open the file called Thekid.cdl saved in the Tutorial directory in Vision Pro 7. Click on the **Edit** menu and then **Select All**.

Click on the **Image** menu and then select the Mode option.



Note that the Mode option is set to RGB indicating that the selected photograph is using a color space comprising Red Green and Blue. To convert the color photograph to grayscale, select the Grayscale option.

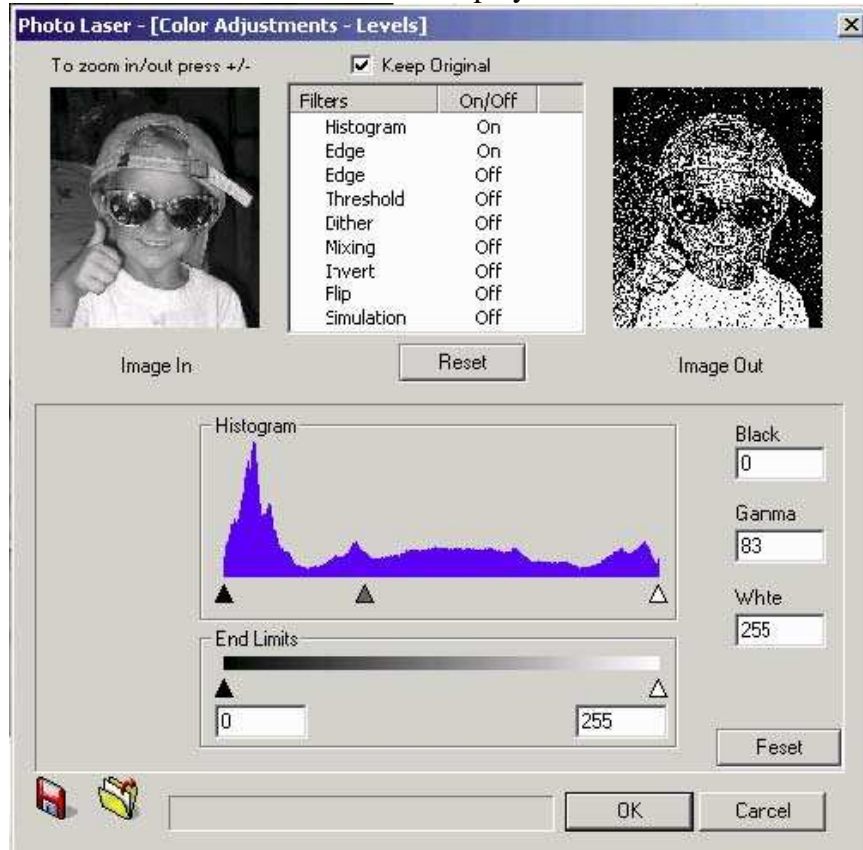


The resulting image should look as follows on screen.



Using the Photo Laser tool

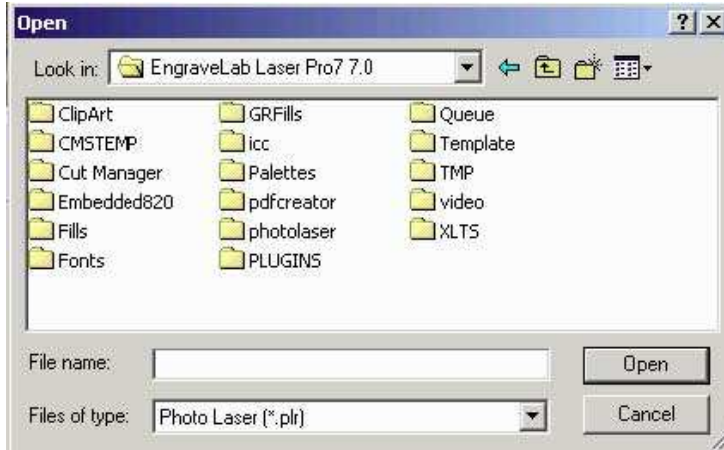
Click on the **Transform** menu and then select **Photo Laser > Interactive**. The Photo Laser window will be displayed on screen.



Various Photo Laser material parameter files have been included in Vision Pro. Make sure to try at least one of the CADlink supplied material parameter files prior to processing your first color photograph. To access the material parameter files, click on the Open icon in the lower left corner of the Photo Laser window.

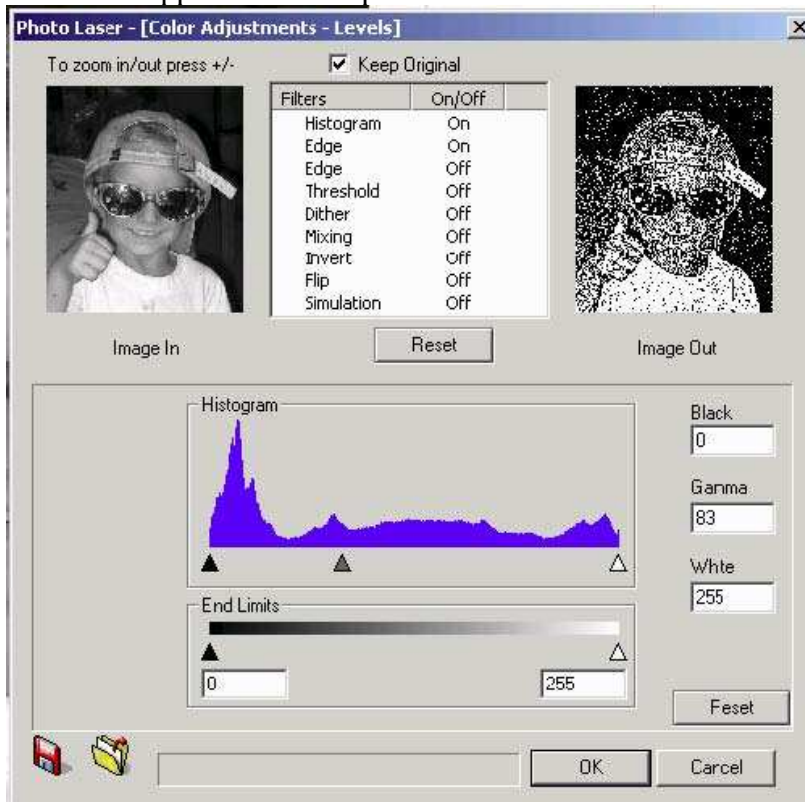


The **Open** window will be displayed on screen. Select the material type that is most appropriate for your current job.



Once the material parameter file is selected, click on the **Open** button. For the purposes of this tutorial, **whtblkplst.plr** (white engraving material with a black background when lasered) was selected.

The Photo Laser window will display again on screen. The **Image Out** window will be updated showing the image as processed using the CADlink supplied material parameter file.



It is recommended to try a number of different material parameter files to see the effect that they have on the selected photograph. Note that positioning the mouse over top of the Image Out window changes the cursor to a magnifying glass. By single clicking on the Left Mouse Button (LMB) and holding the LMB, a magnified zoom window can be used to visually inspect the updated photograph.

Click on the **OK** button to render the Photo Laser file on screen in Vision Pro.

Using the **File, Print** function in Vision Pro, you can output this image to your laser engraver using the factory supplied Windows Print Driver.

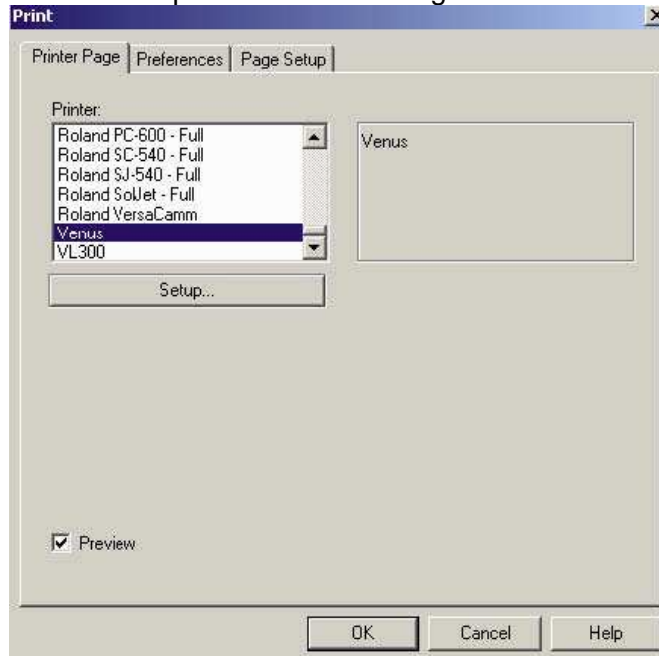
Congratulations on completing the basic workflow to convert a color photograph into a high quality laser engraveable image in Vision Pro 7.



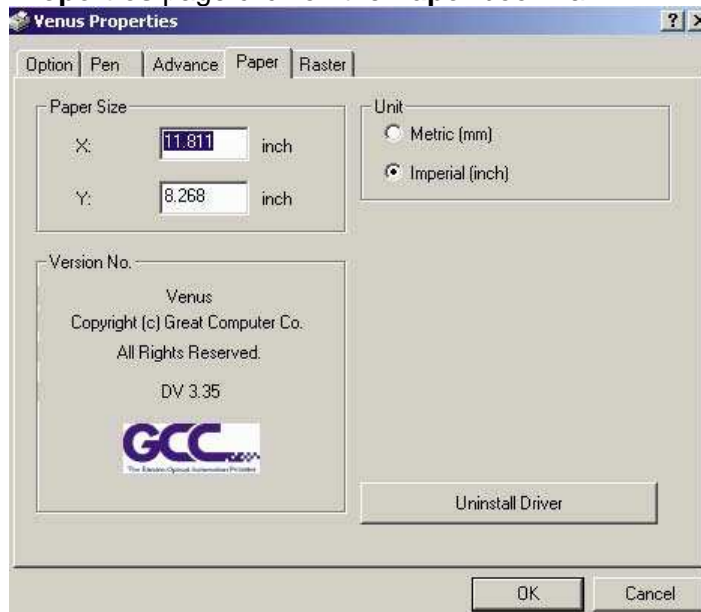
How to Setup a Vector Cut for Laser Engraving

Setting Plate Size

You will want to ensure that your plate size is not larger than your laser engraver will allow. To verify the allotted printing space, click **File** then **Print**. This opens the **Print** dialog box.

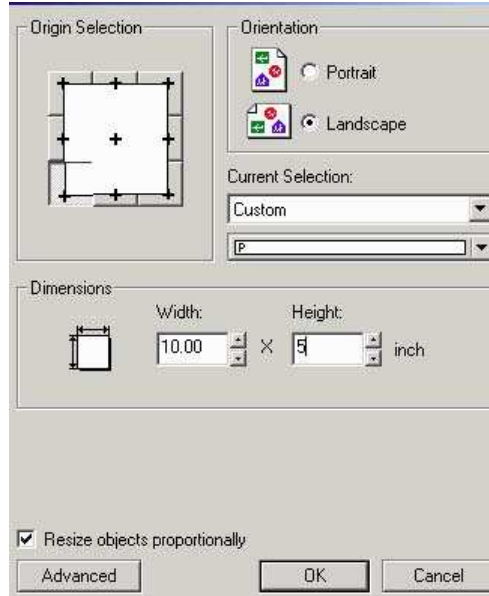


Select your engraver from the list and click **Setup**, then in the **Printer Properties** page click on the **Paper** bookmark.



In this example we will want to keep our plate size smaller than 11.811inches by 8.268inches. To adjust your plate settings, click on

Layout and select **Plate Size**. This opens the **Plate Size** dialog box.



Remember, in this example, our engraver will only allow an area of 11.811inches by 8.268inches; we don't want to exceed this. Before continuing we also want to make sure that **Show Fill**, **Show Reduced Bitmap** and **Show Tool Path** are enabled in the **View** menu.

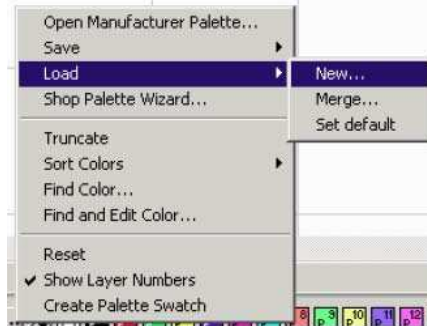


Setting Up the Color Palette

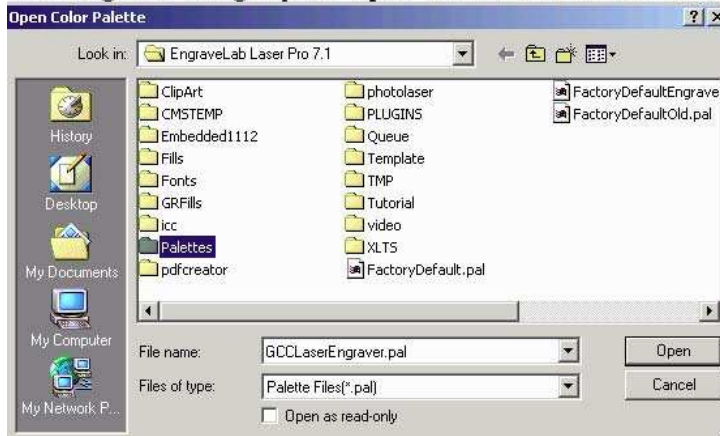
Before we begin, you will need to have Vision Pro open with no items on the screen. We are going to install a color palette, specific for our engraver. At the bottom left of your screen you will want to select the **Context Menu** button.



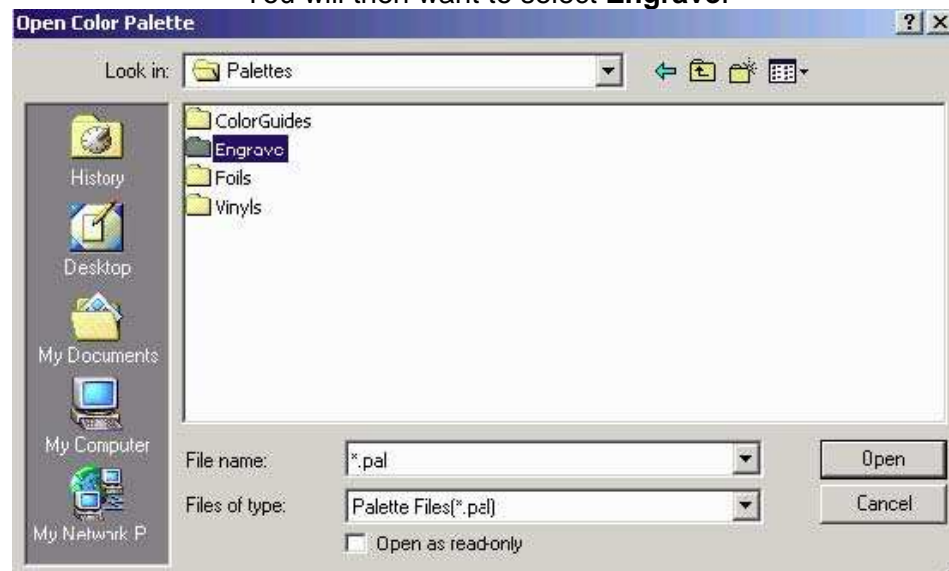
This opens a fly out menu, from which, you want to select **Load** then **New**



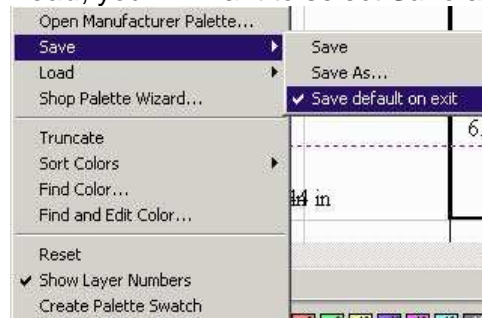
Selecting **New** brings up the **Open Color Palette**. From this, you will want to select **Palettes**



You will then want to select **Engrave**.



Finally double click on the file that is most compatible with your engraver. In this example we will use **GCCLaserEngraver.pal**. Following this, you will want to ensure that these colors are still present when you reopen Vision Pro. To ensure this, go back to the **Context Menu** at the bottom left of the screen. This time instead of choosing **Load**, you will want to select **Save** and the **Save default on exit**.

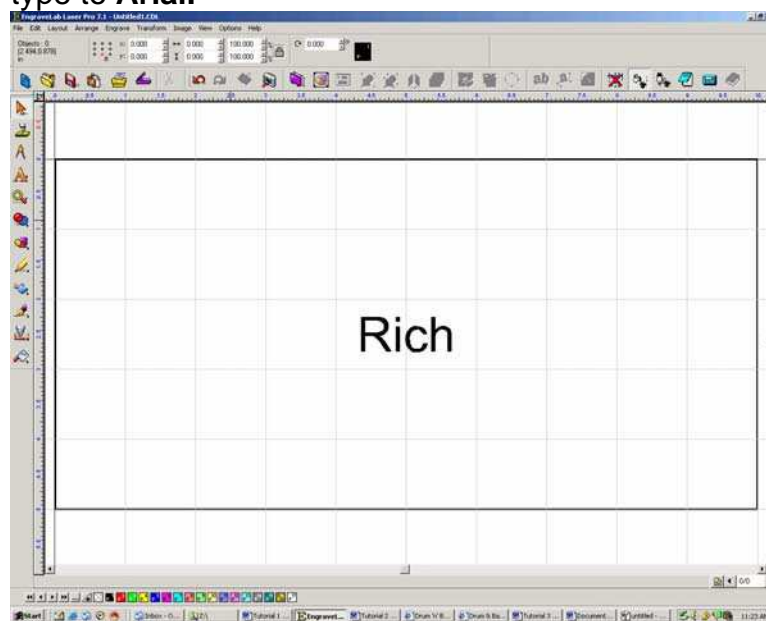


Congrats, you have successfully loaded a new color palette. Please close Vision Pro and reopen to allow the changes to affect.

Setting up a File for a Contour Cut In this example, we are again going to create a file. Open Vision Pro and select **Frame Text Compose** from the **Text Tools** fly out.



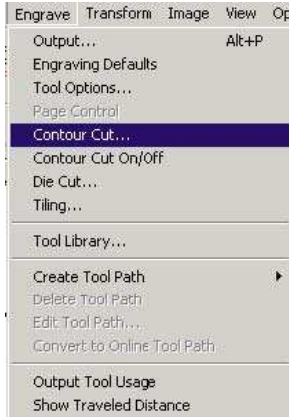
To keep things simple we will write our name. We will leave black as the font color, set the font height at .5 inches and set the font type to **Arial**.



The file is now ready to be set up for a vector cut. To do this, click

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on the writing so that it is highlighted. Then, go to the **Engrave** menu and select **Contour Cut**.



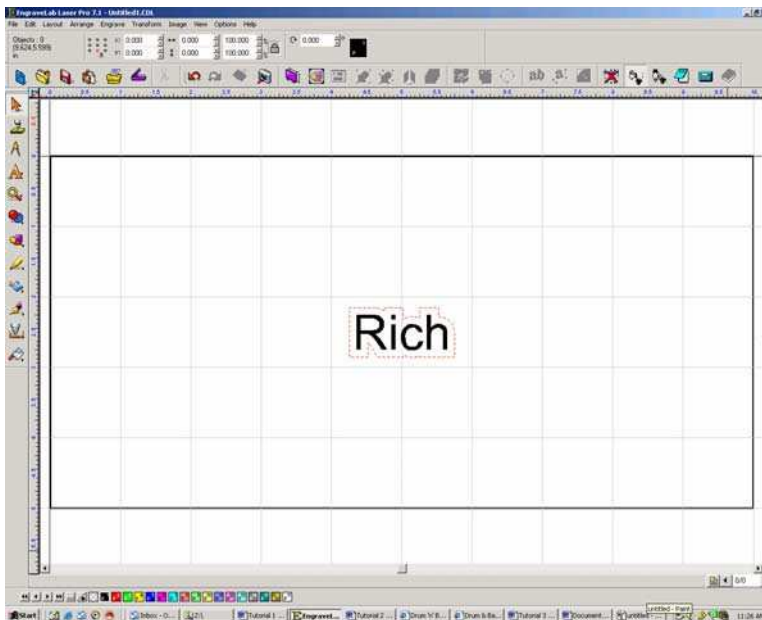
This opens the **Contour Cut** toolbar at the top.



Next you are going to want to define the contour of the object. To do this click on the **Offset** box and increase the value to **0.10**. You also want to change the color of the contour from black to red



Your screen should now look like this. Notice the effect of the contour cut?



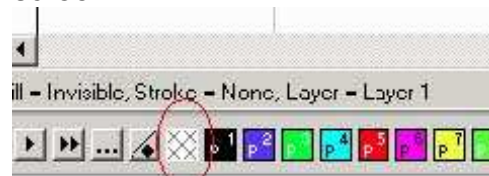
The file is now ready to print. See printing at the end of this tutorial.

Setting up a File for a Vector Cut

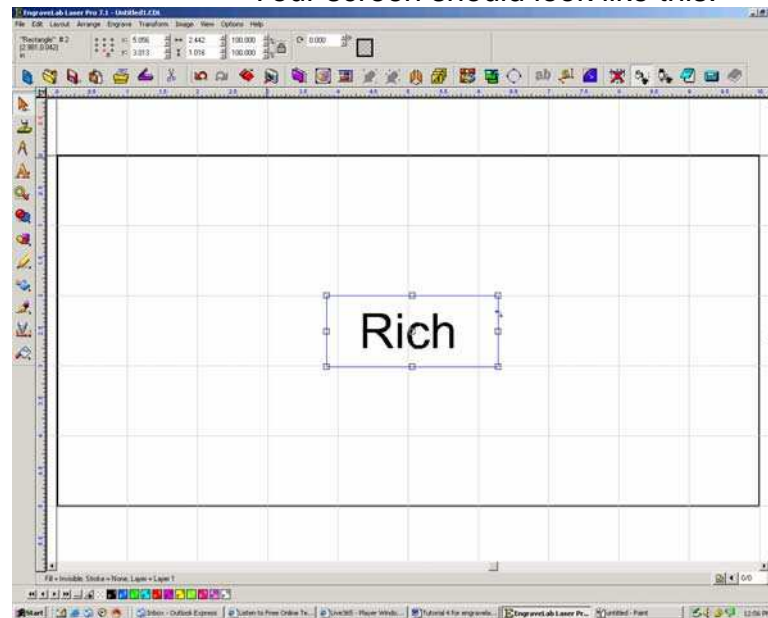
For this example we are going to use the same setup as above, name written in **Arial**. Once you have completed this you will want to select the **Rectangle** from the **Shapes** menu fly out and draw a rectangle around your name.



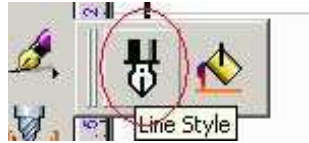
Next you want to assign an invisible fill to your rectangle. To do this select the invisible fill from you Palette at the bottom of the screen.



Your screen should look like this.



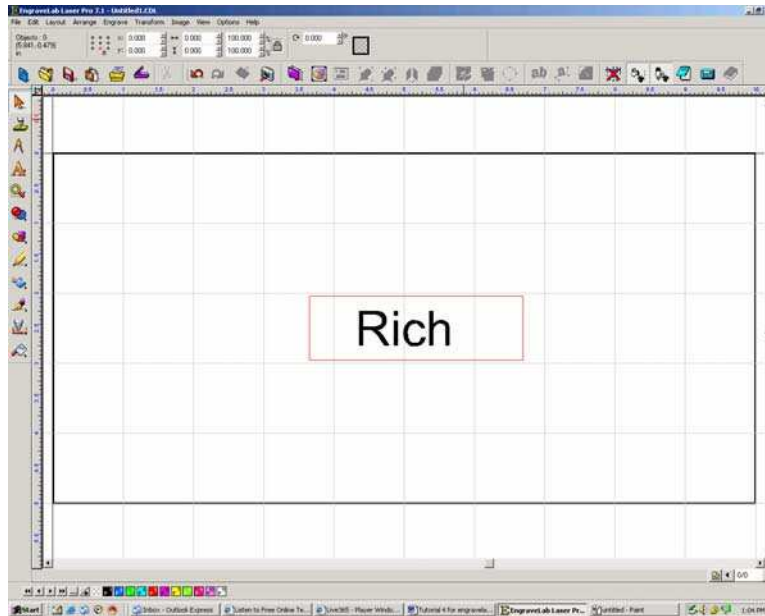
With the rectangle selected you will want to select **Line Style** from the **Stroke and Fill Tools** fly out



This opens the **Line Style** toolbar at the top of your page. From which you will want to select **Hairline** and then you will want to change the color from black to red.



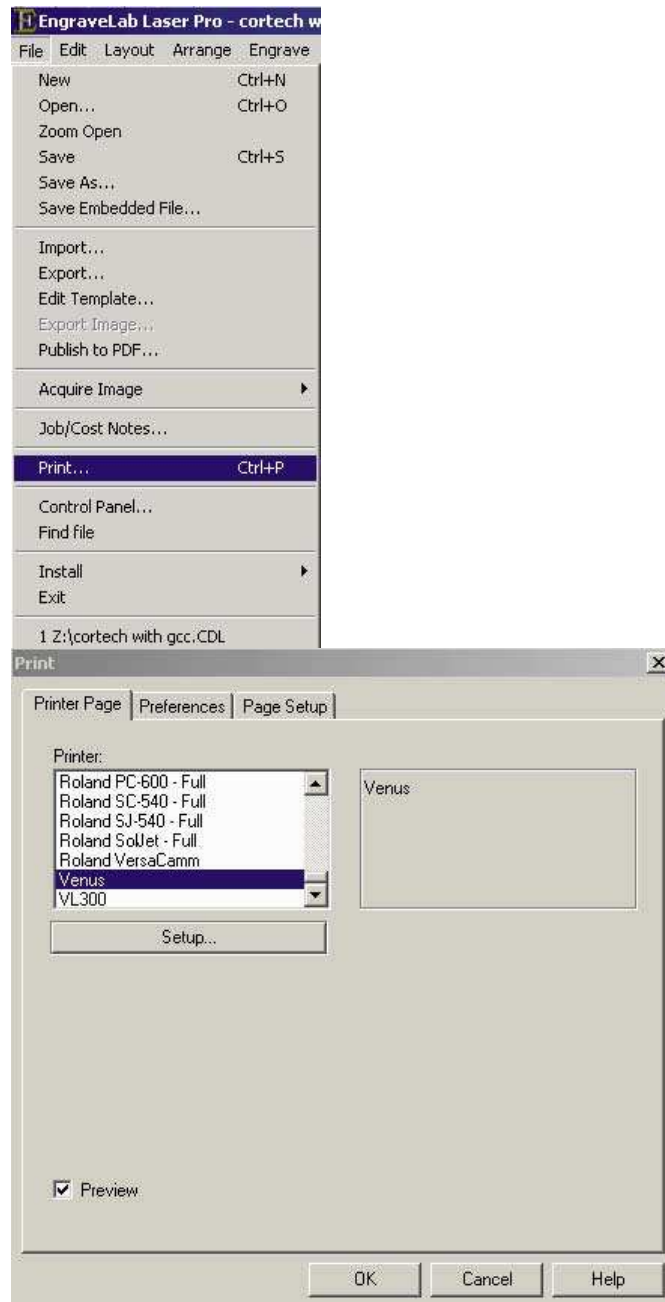
Your screen should look like this.



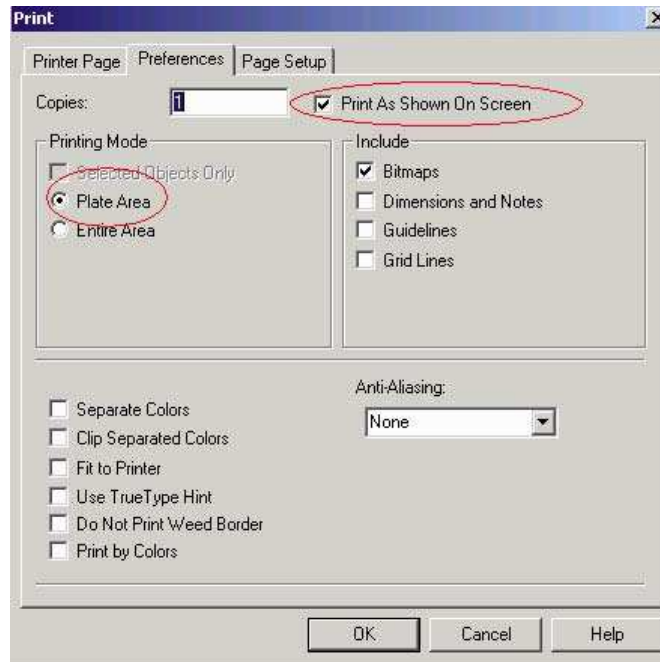
You are now ready to print the file.

Printing

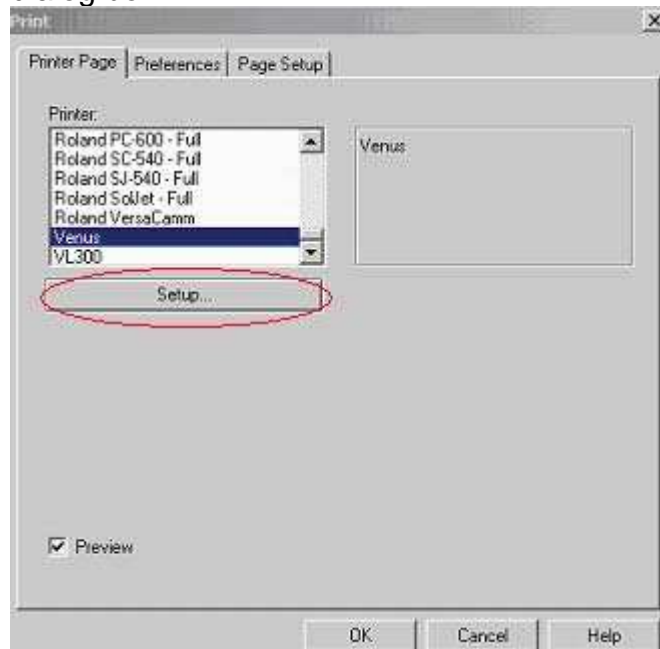
Now that you have set up your file, you will learn how to print the file. From the **File** drop down menu, you will want to select **Print**. This will open up the **Print** dialog box.



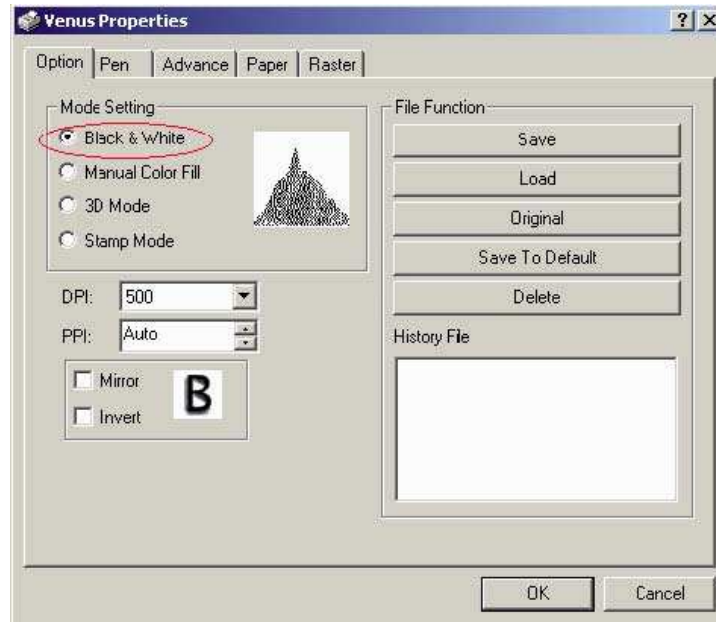
I would recommend that you select the print **Preview** button. Before you adjust the printer setup, it is important to adjust the print preferences. To do this select the middle bookmark labelled **Preferences** which will bring up the following dialog box



It is very important that the **Print As Shown On Screen** box has a checkmark in it. Also, it is important that **Plate Area** is also selected as this will affect the position of the graphics on the print page. Click the **Printer Page** bookmark to return to the **Print** dialog box.

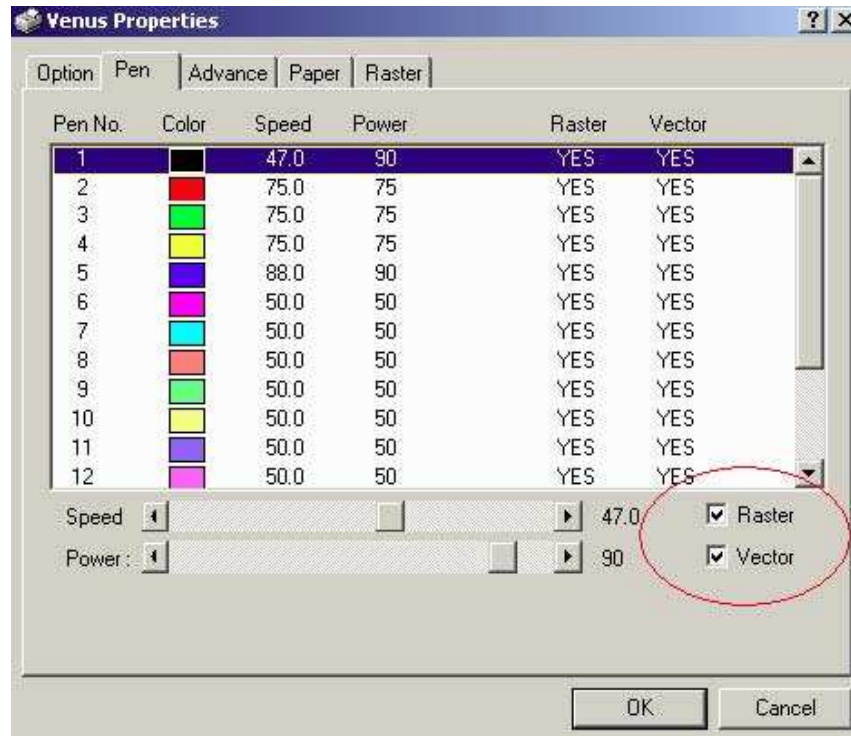


You will then want to select the appropriate printer and choose the **Setup** function directly below the list.



This will open up the **Printer Properties** dialog box shown above. For this example you will want to make sure that the **Mode Setting** is **Black and White**. Following this you will want to select the **Pen** option, which brings up the box shown below. Since we have used two colors in our examples, we will want to adjust the settings for both black and red. Set the black **Power and Speed** settings to 100% and 40% respectively. Set the red **Power and Speed** settings to 74% and 68% respectively. Also, make sure that **Vector** and **Raster** are enabled. Click **OK** and then click **OK**. The laser engraver should now raster engrave the word "Rich" at 100% power and 40%; the rectangle contour cut should be done at 74% power and 68% speed. Congratulations, you have completed this tutorial.

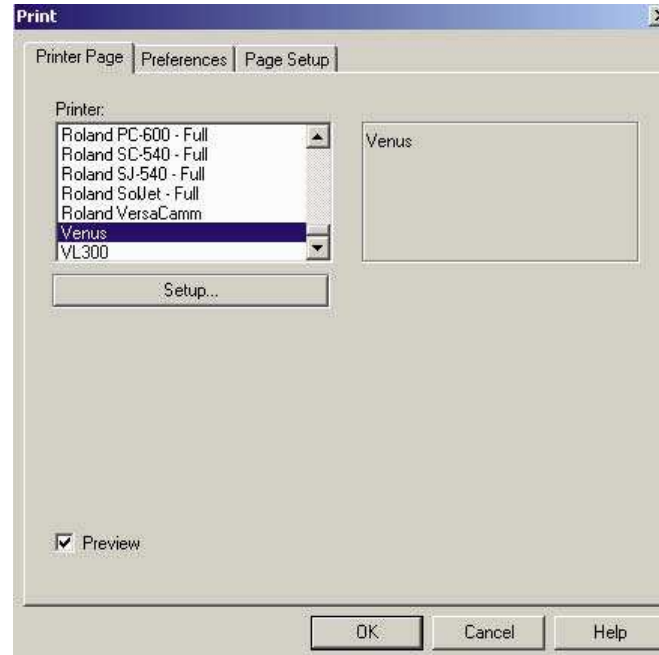
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Preparing a Raster Engraving Job

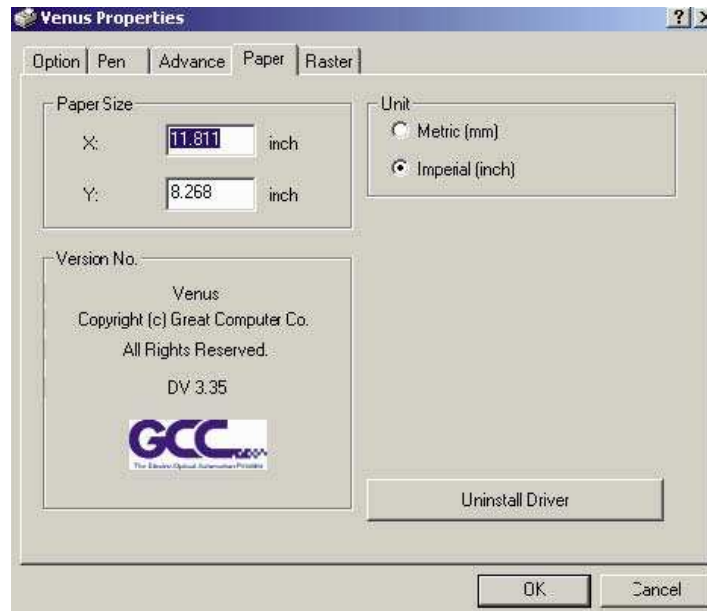
Setting Plate Size

You will want to ensure that your plate size is not larger than your laser engraver will allow. To verify the allotted printing space, click **File** then **Print**. This opens the **Print** dialog box.

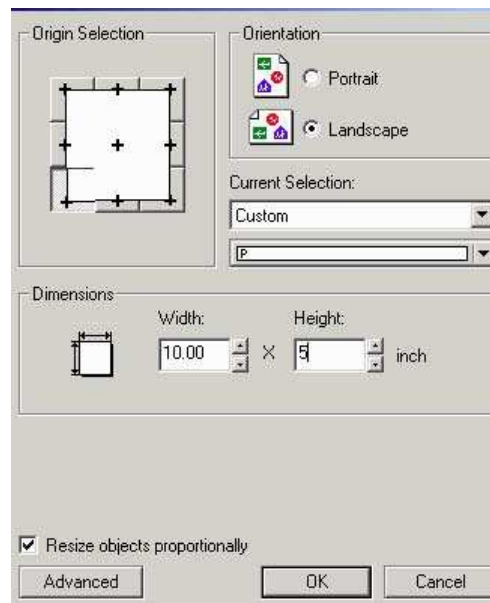


Select your engraver from the list and click **Setup**, then in the **Printer Properties** page click on the **Paper** bookmark.

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In this example we will want to keep our plate size smaller than 11.811inches by 8.268inches. To adjust your plate settings, click on **Layout** and select **Plate Size**. This opens the **Plate Size** dialog box.



Remember, in this example, our engraver will only allow an area of 11.811inches by 8.268inches, we don't want to exceed this. Before continuing we also want to make sure that **Show Fill**, **Show Reduced Bitmap** and **Show Tool Path** are enabled in the **View** menu.

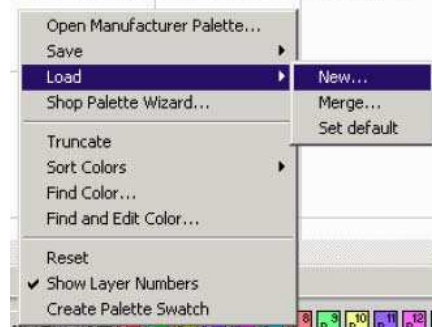


Setting Up the Color Palette

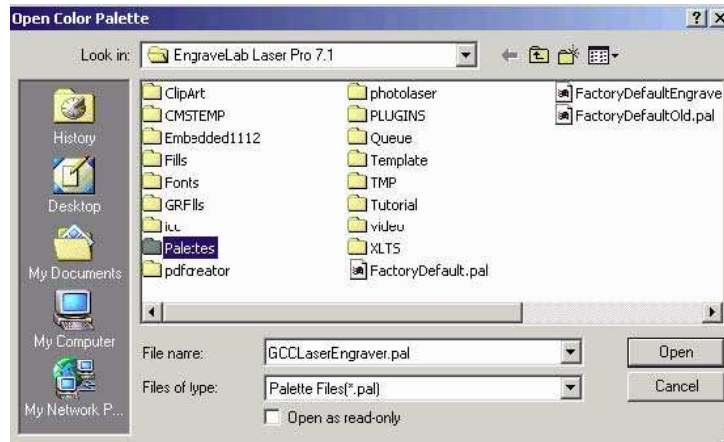
Before we begin, you will need to have Vision Pro open with no items on the screen. We are going to install a color palette, specific for our engraver. At the bottom left of your screen you will want to select the **Context Menu** button.



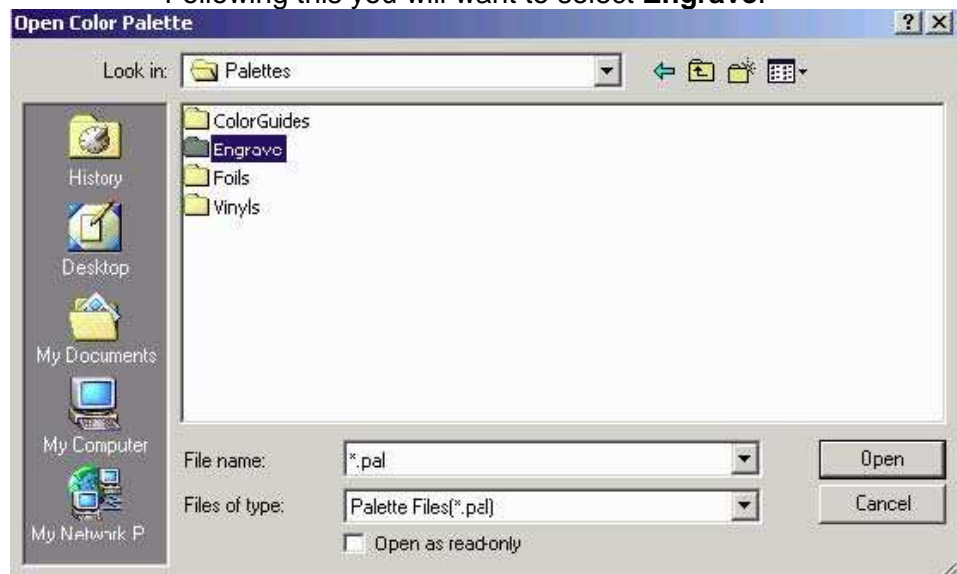
This opens a fly out menu, from which, you want to select **Load** then **New**



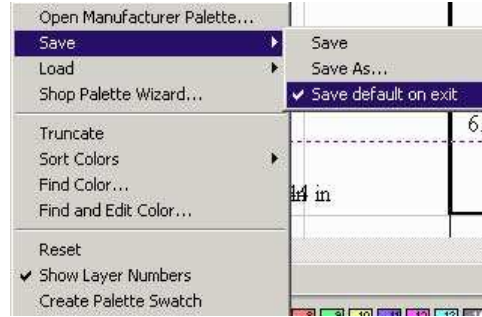
Selecting **New** brings up the **Open Color Palette**. From this, you will want to select **Palettes**.



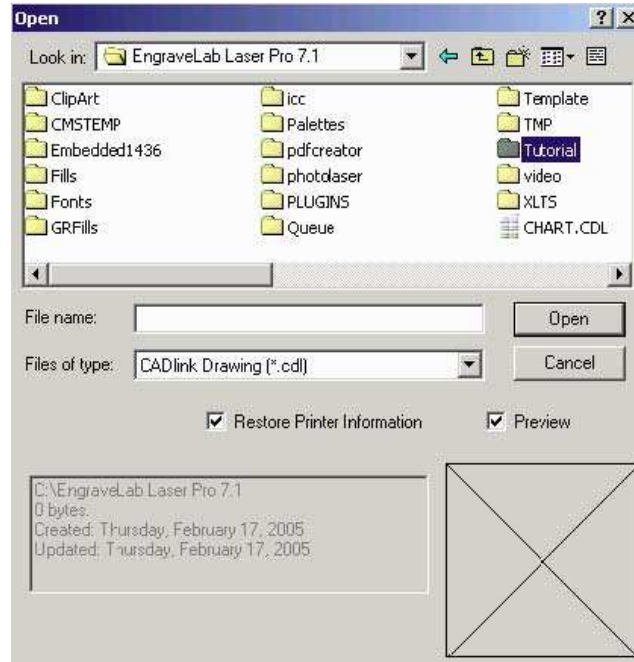
Following this you will want to select **Engrave**.



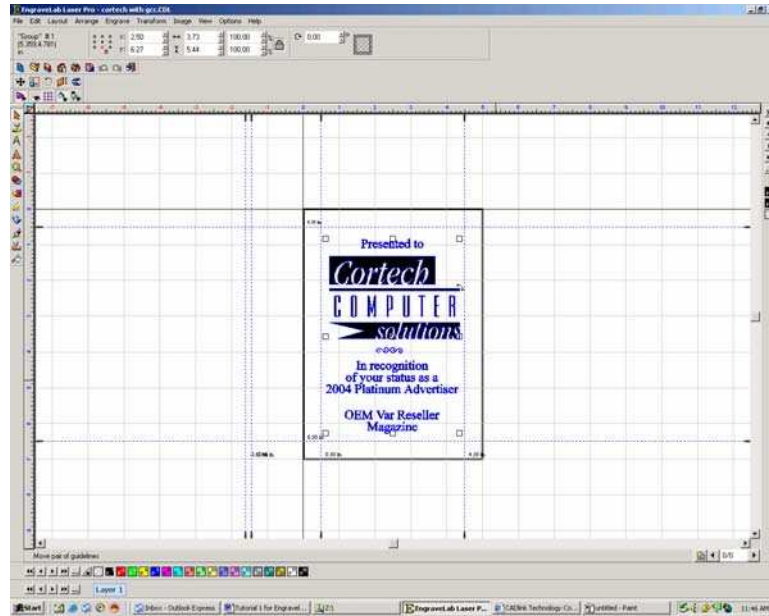
Finally double click on the file that is most compatible with your engraver. In this example we will use **GCCLaserEngraver.pal**. Following this, you will want to ensure that these colors are still present when you load the tutorial file. To ensure this, go back to the **Context Menu** at the bottom left of the screen. This time instead of choosing **Load**, you will want to select **Save** and the **Save default on exit**.



Congrats, you have successfully loaded a new color palette. Please close Vision Pro and reopen to allow the changes to affect. You are now ready to open our tutorial file. For the following example we are using a plaque with a size of 7'x5'. Once you have opened the file, you will want to make sure that the plate size is equal to the size of the material you are engraving. To load the file **Cortech.cdl** go to **File**, then **Open**. The location of the file is in the **Vision Pro** folder under **Tutorials**.



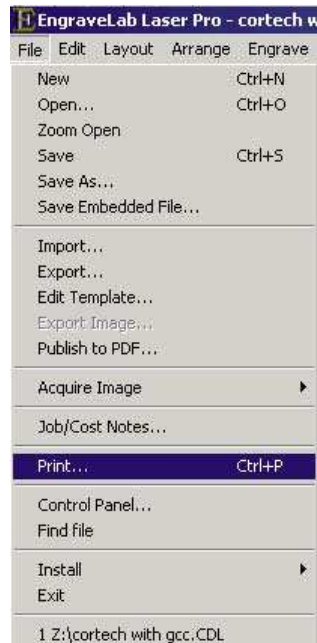
Your screen should look like this



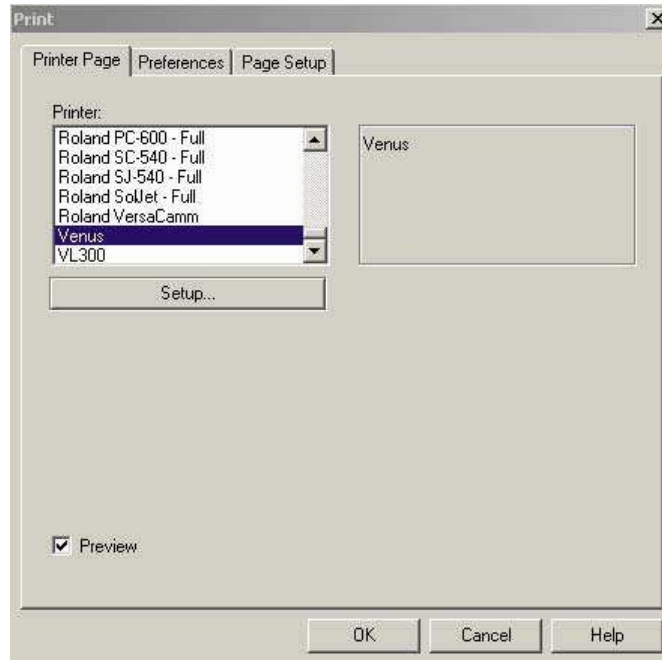
I would like to mention again to ensure that your plate size matches you engraving material (ours is 7 inches x 5 inches)

Printing- Raster Engraving

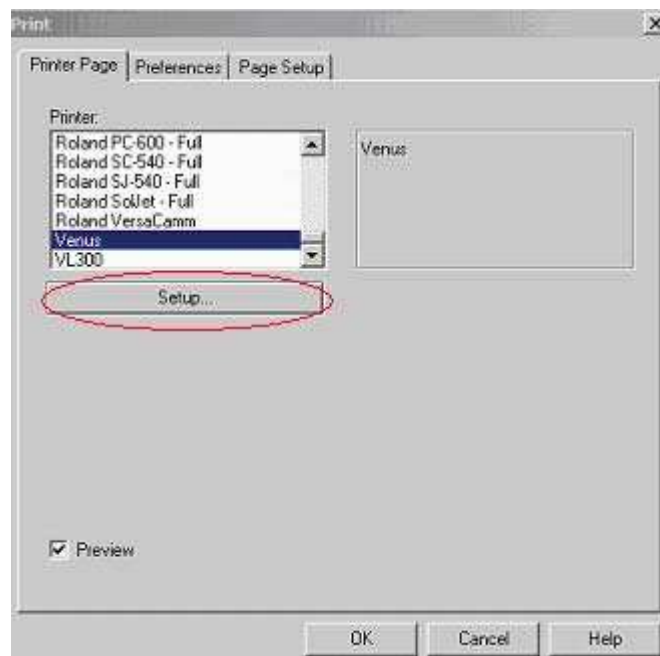
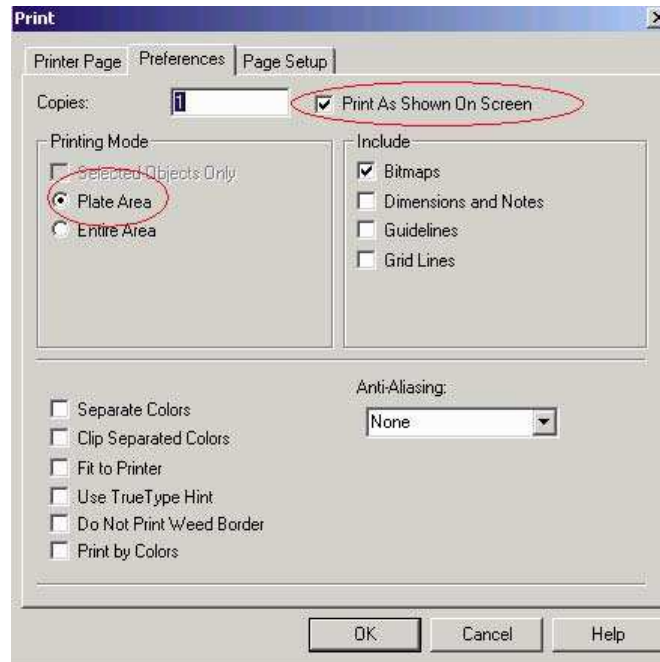
Now that you have set up your file, you will learn how to print the file. From the **File** drop down menu, you will want to select **Print**.



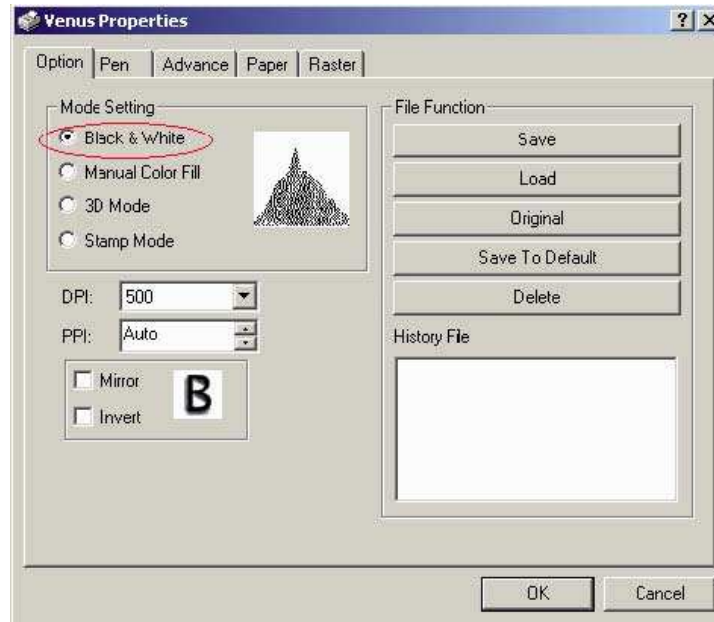
This will open up the **Print** dialog box.



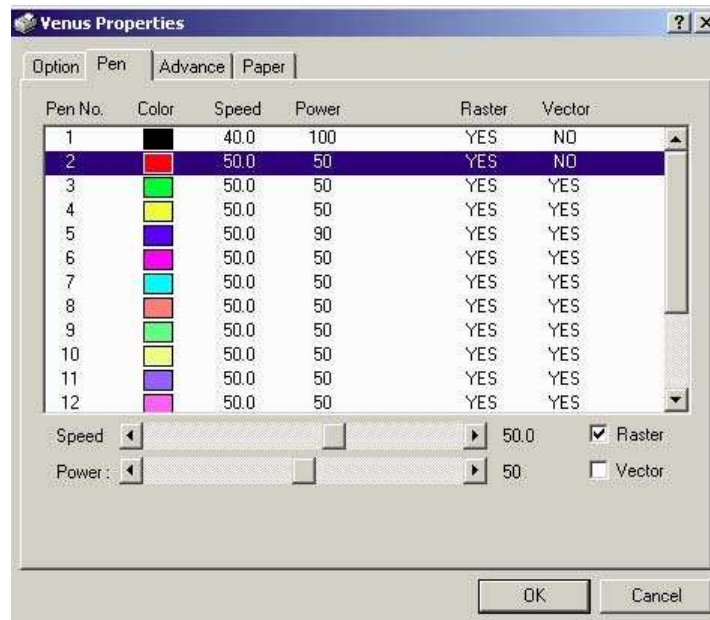
I would recommend that you select the print **Preview** button. Before you adjust the printer setup, it is important to adjust the print preferences. To do this select the middle bookmark labelled **Preferences** which will bring up the following dialog box. It is very important that the **Print As Shown On Screen** box has a checkmark in it. Also, it is important that **Plate Area** is also selected as this will affect the position of the graphics on the print page. Click the **Printer Page** bookmark to return to the **Print** dialog box.



You will then want to select the appropriate printer and choose the **Setup** function directly below the list.



This will open up the **Printer Properties** dialog box shown above. For this example you will want to make sure that the **Mode Setting** is **Black and White**. Following this you will want to select the **Pen** option, which brings up the box shown below



You will notice that there is a list of many colors. In this example we are only using black. The default settings are 50% for both speed and power. To adjust both settings simply select the sliders at the bottom left and adjust as required. This process can be repeated for any number of colors being used. Make sure the **Raster** box is checked. Click **OK**, which will return you to the

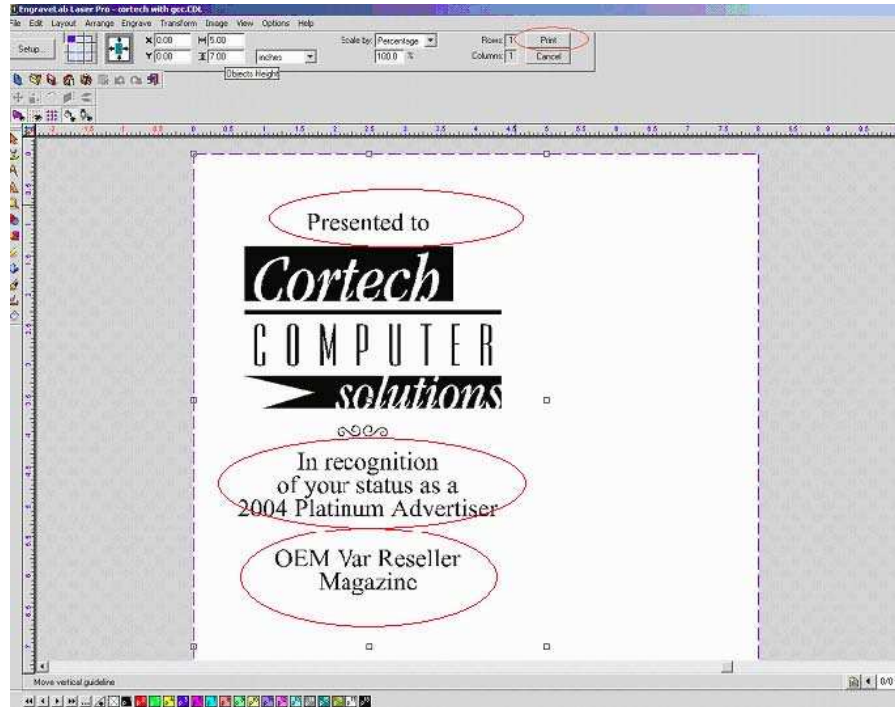
Print dialog box. Click **OK**, which will take you to the **Print Preview** screen.



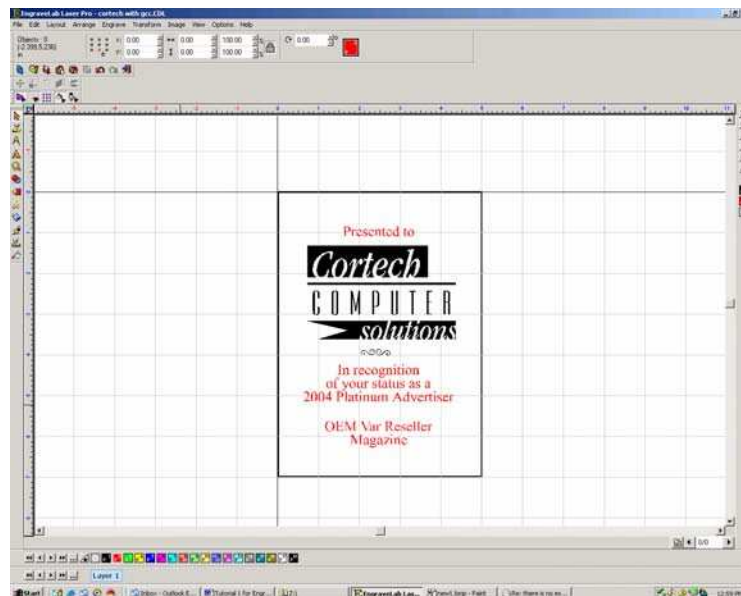
This shows what will be printed and where it will be located. Finally click **Print**. This concludes the printing setup. You're now ready to Raster Engrave.

Raster Engraving- Advanced

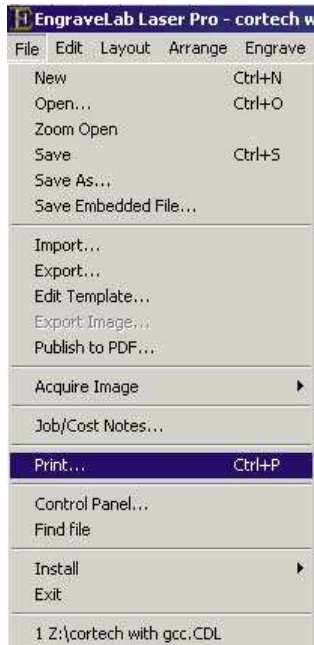
In this section we will adjust colors to allow for different power and speed settings for each color on screen. Change the color of the text, hold down **CRTL** on your keyboard and left click with your mouse on the writing (see screen shot).



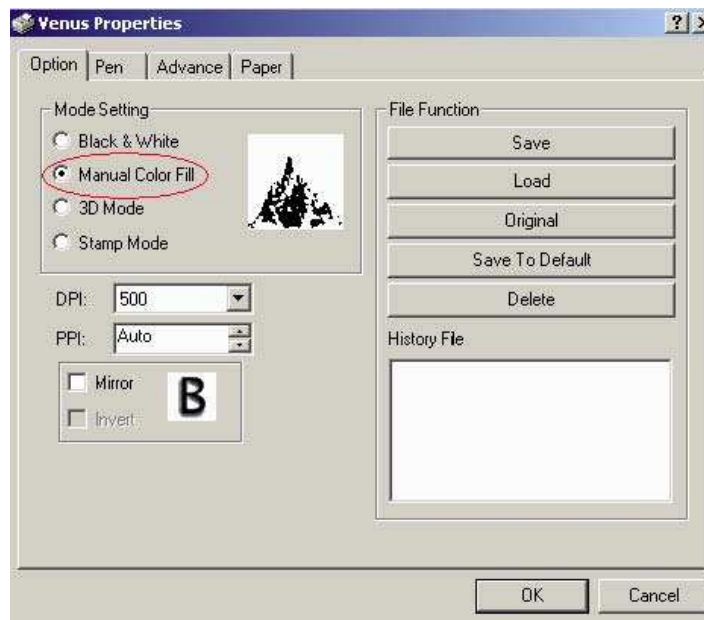
Once the writing has been selected you will want to click on the color red on the color **Palette** at the bottom of your screen. Now that we have changed the color of the writing on-screen to red, we can adjust the pen settings for the red color.



Notice that the color of the writing has been changed from black to red. This will mean that the setup is somewhat different. You still want to select **Print** from the **File** menu.

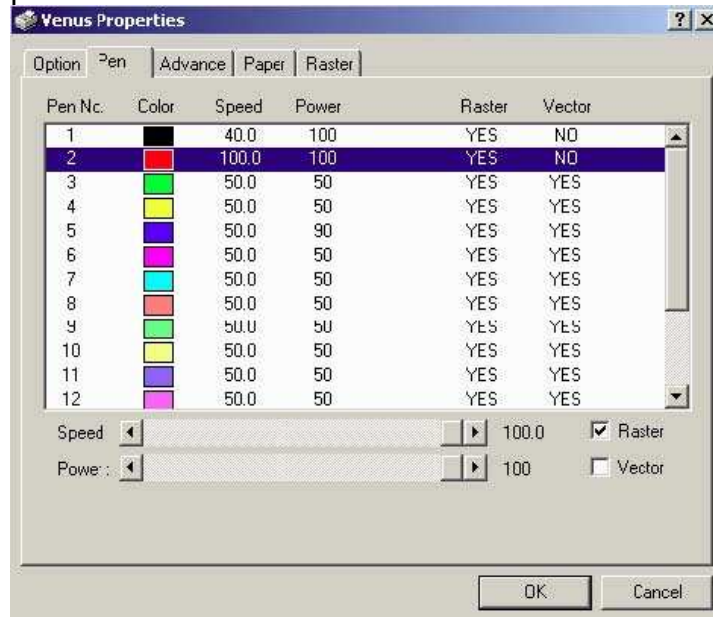


The print preferences remain the same, but the printer properties must be adjusted to reflect the changes made. Under the **Options** tab of the **Printer Properties** you want to make sure that the **Manual Color Fill** option is selected.

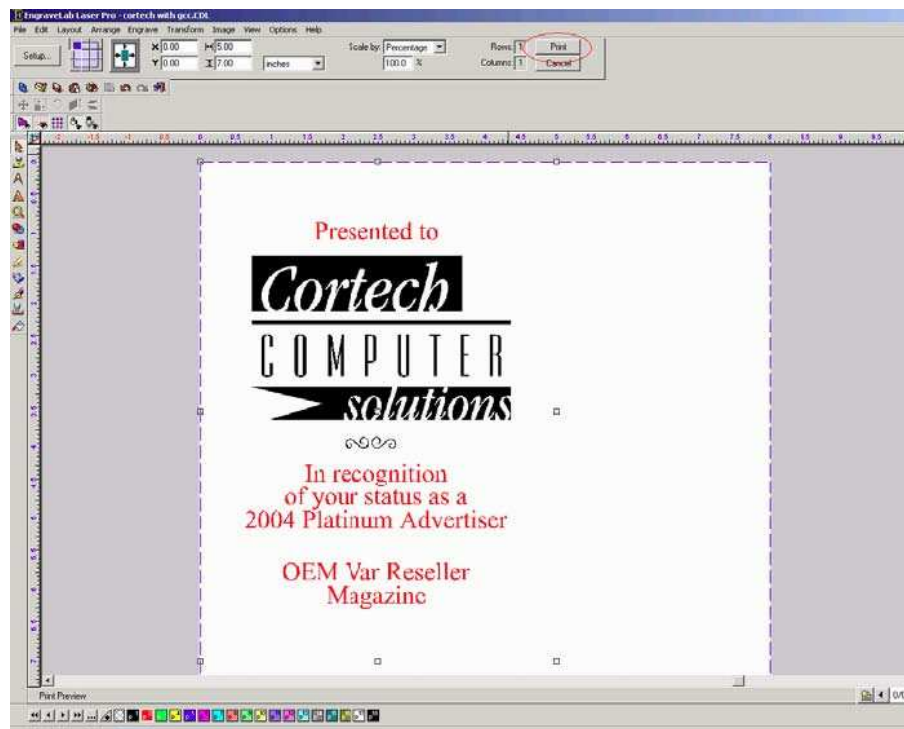


You will then want to select the **Pen** tab. Because the black color still remains, we will leave the settings the same as before. Now that we have added another color we can adjust the pen settings for the red color as well. Notice that the default setting for power and speed is 50%. In this example we will set both speed and

power to 100%.



Once you have adjusted the colors click **OK**. This will return you to the **Print** dialog box. Click **OK** and you will be taken to the print preview screen.



Click **Print**. Notice that the black graphics laser at a power of 40% and a speed of 100% and that the red text lasers at a power setting of 100% and a speed setting of 100%? You have now completed

this

Tutorial.

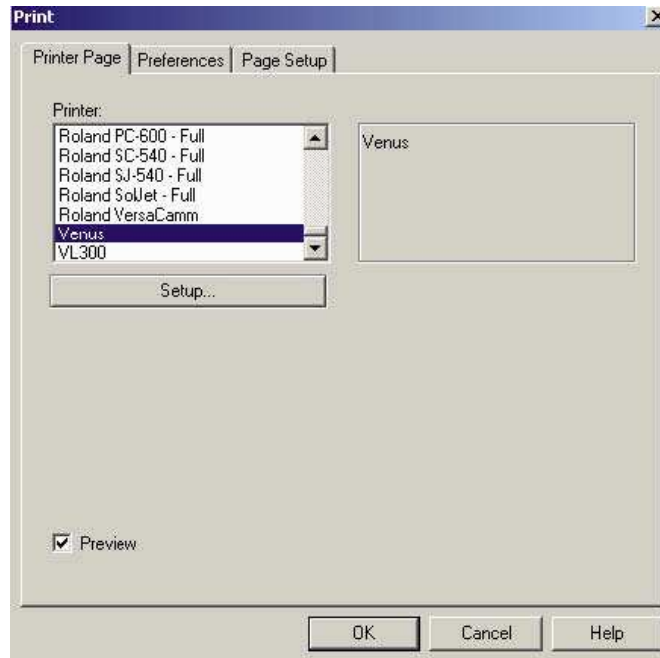
Congratulations.



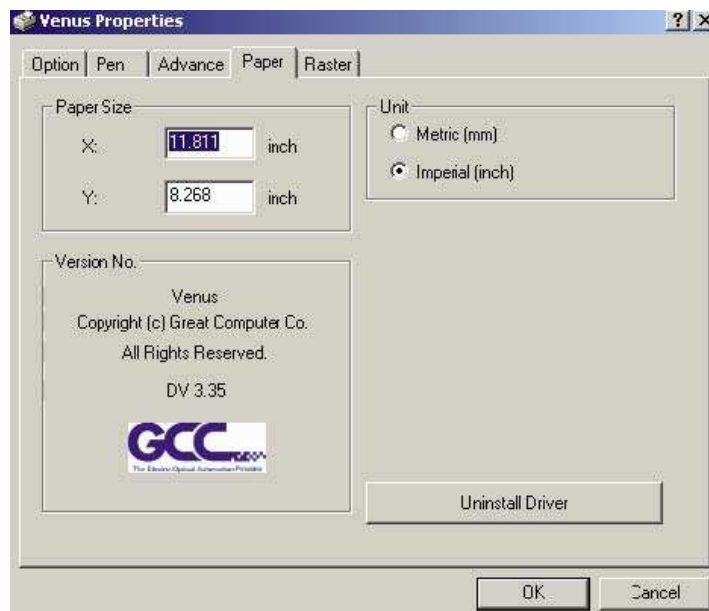
How to Setup a Single Line Font for Laser Engraving

Setting Plate Size

You will want to ensure that your plate size is not larger than your laser engraver will allow. To verify the allotted printing space, click **File** then **Print**. This opens the **Print** dialog box.

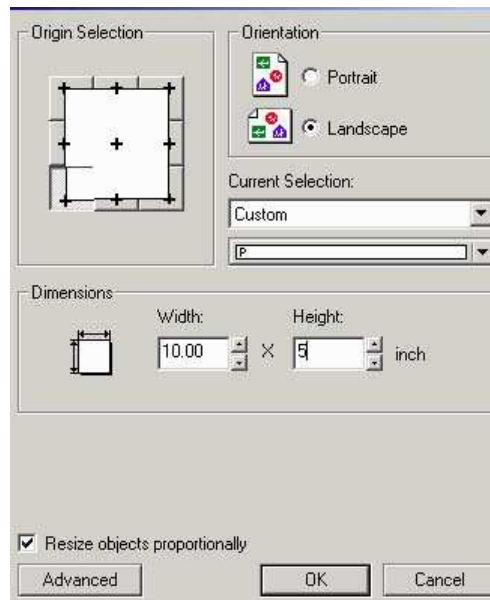


Select your engraver from the list and click **Setup**, then in the **Printer Properties** page click on the **Paper** bookmark.



In this example we will want to keep our plate size smaller than

11.811inches by 8.268inches. To adjust your plate settings, click on **Layout** and select **Plate Size**. This opens the **Plate Size** dialog box.



Remember, in this example, our engraver will only allow an area of 11.811inches by 8.268inches, we don't want to exceed this. Before continuing we also want to make sure that **Show Fill**, **Show Reduced Bitmap** and **Show Tool Path** are enabled in the **View** menu.



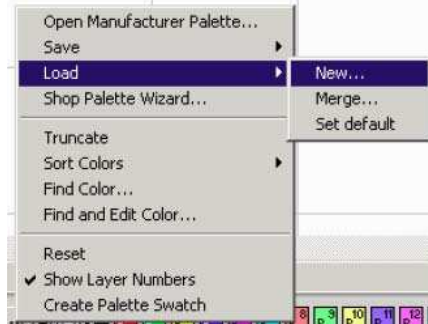
Setting Up the Color Palette

Before we begin, you will need to have Vision Pro open with no items on the screen. We are going to install a color palette, specific for our

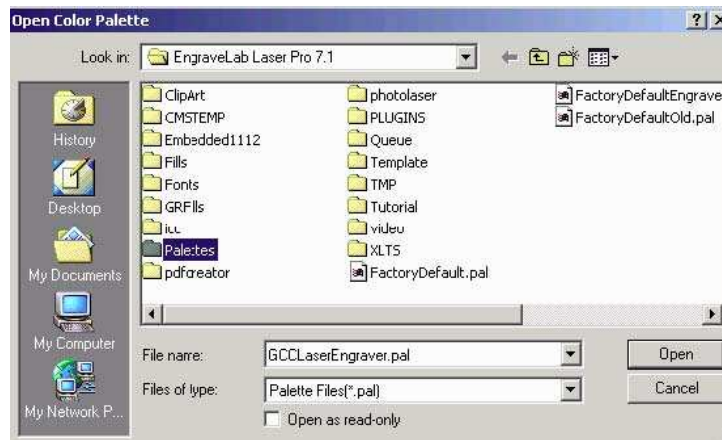
engraver. At the bottom left of your screen you will want to select the **Context Menu** button.



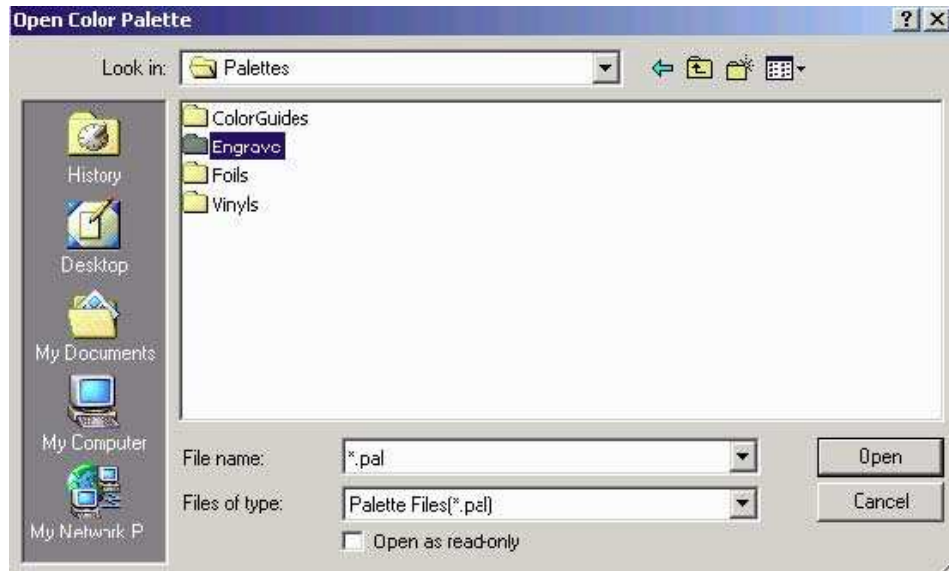
This opens a fly out menu, from which, you want to select **Load** then **New**



Selecting **New** brings up the **Open Color Palette**. From this, you will want to select **Palettes**.

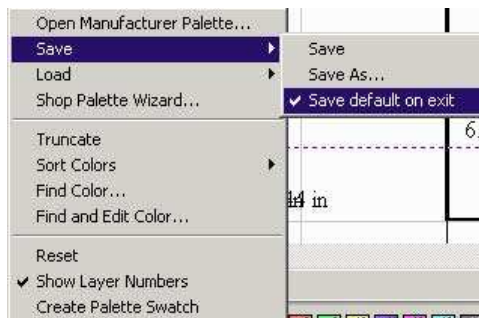


You will then want to select **Engrave**.



Finally double click on the file that is most compatible with your engraver. In this example we will use **GCCLaserEngraver.pal**.

Following this, you will want to ensure that these colors are still present when you reopen Vision Pro. To ensure this, go back to the **Context Menu** at the bottom left of the screen. This time instead of choosing **Load**, you will want to select **Save** and the **Save default on exit**.



Congrats, you have successfully loaded a new color palette. Please close Vision Pro and reopen to allow the changes to affect.

Creating a Single Line File for Engraving

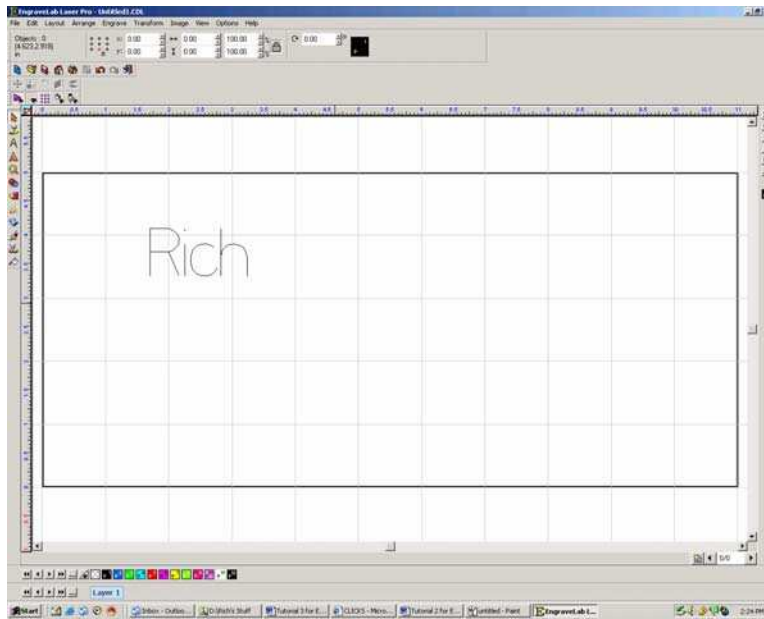
In this example, we are again going to create a file. Open Vision Pro and select **Frame Text Compose** from the **Text Tools** fly out.



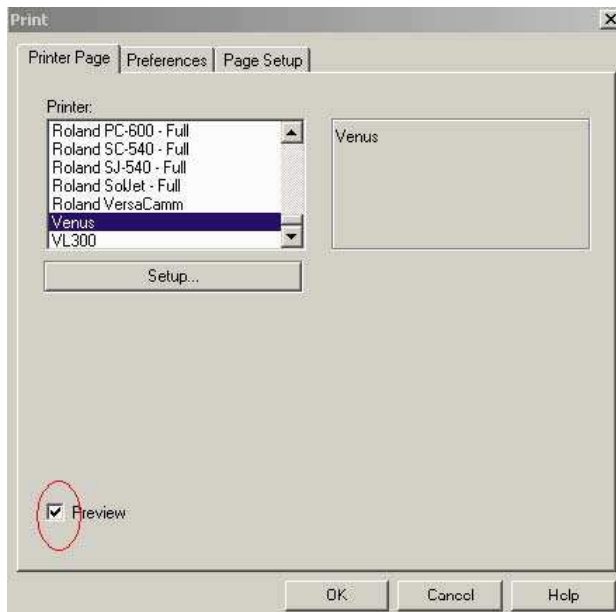
To keep things simple we will write our name. We will leave black as the font color, set the font size to .5 inches and set the font type

to **DINO**.

Your screen should look similar to the one below, the only difference being the name that is written.

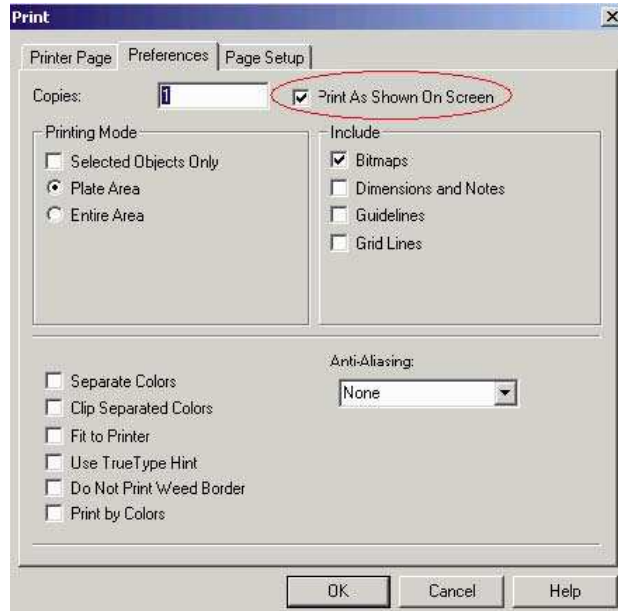


The file is now ready to print. To do so, go to **File** and select **Print**. This brings up the **Print** dialog box. Make sure the **Preview** checked.

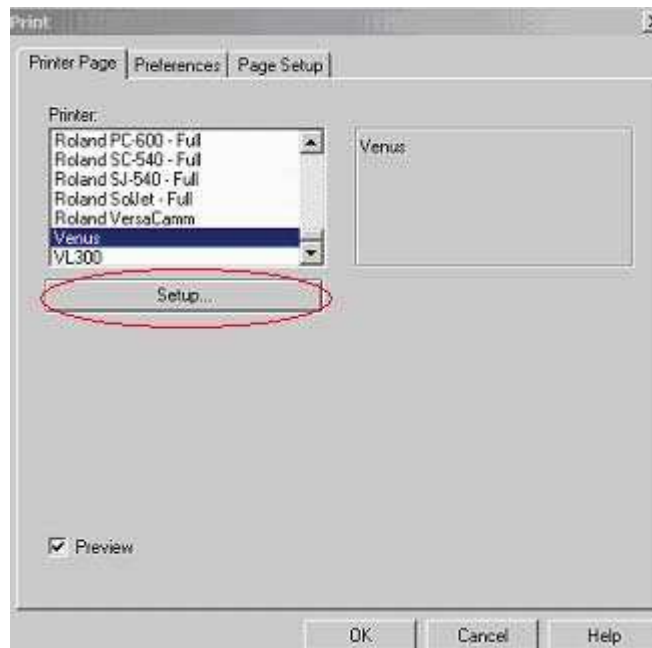


You are going to want to click on the **Preferences** bookmark, and you will want to check to see if the **Print As Shown On Screen**

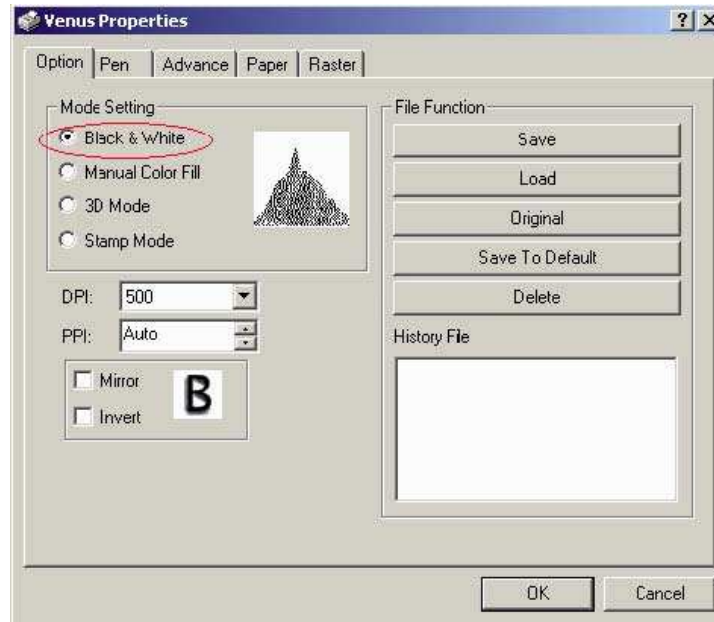
box is checked



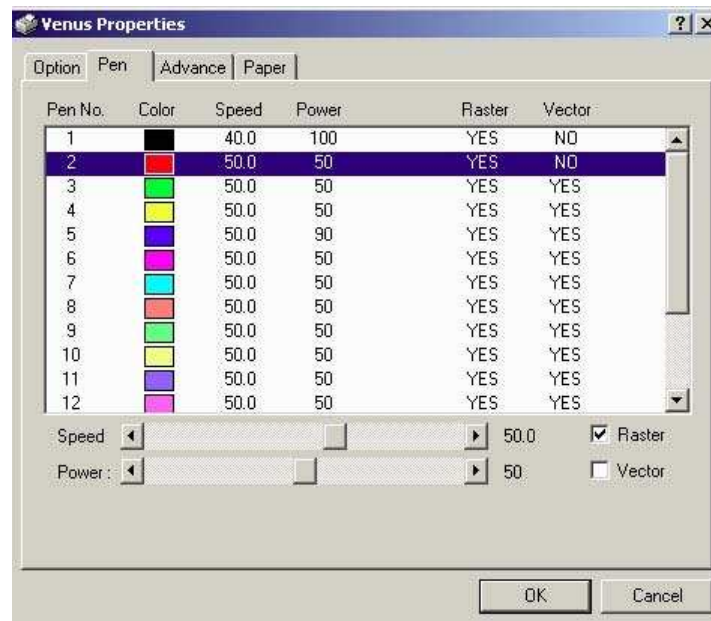
Now that the print settings have been adjusted your are going to want to adjust the printer. Click on the **Printer Page** bookmark, choose the appropriate printer and click on **Setup**.



This opens the **Printer Properties** dialog box.

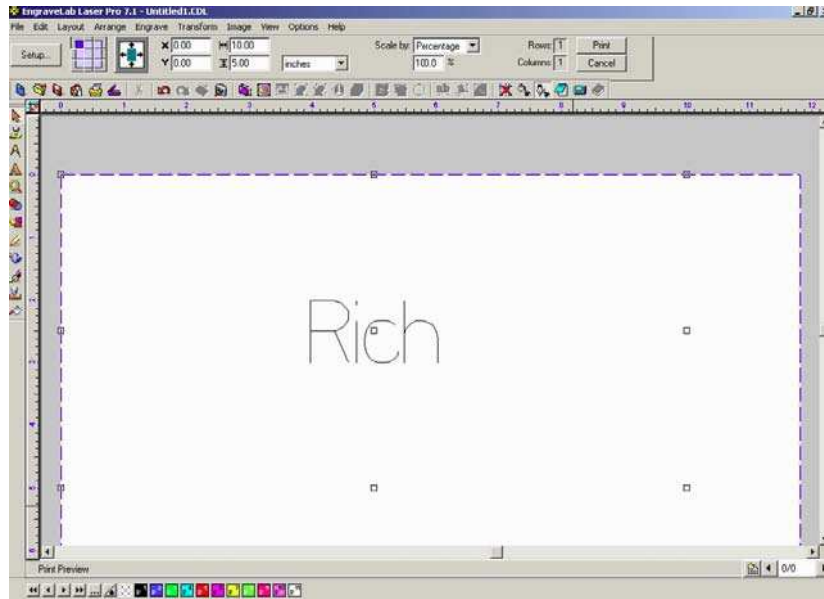


Under the **Mode Setting** option, ensure the **Black & White** box is selected. Next we want to adjust the pen settings. Select the **Pen** bookmark and set the **Black Speed** to **40%** and the set the **Black Power** to **100%**. You will also want to make sure that the **Raster** box is disabled and that the **Vector** box is enabled.



The print and printer settings are now finished. Click **OK** to return to the **Print** dialog box. Click **Ok** again and you will be taken to the **Print Preview** screen.

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Your file is now ready for the engraver. Click **Print** and you are done!

Creating a Multi-line Plate

The following steps demonstrate how to create a multi-line plate, which will then be used to create a series of badges.

Initial Setup

Before beginning the procedure, the following workspace settings were made.

Workspace rulers

The ruler units were set to inches. This was done by left-clicking the ruler.



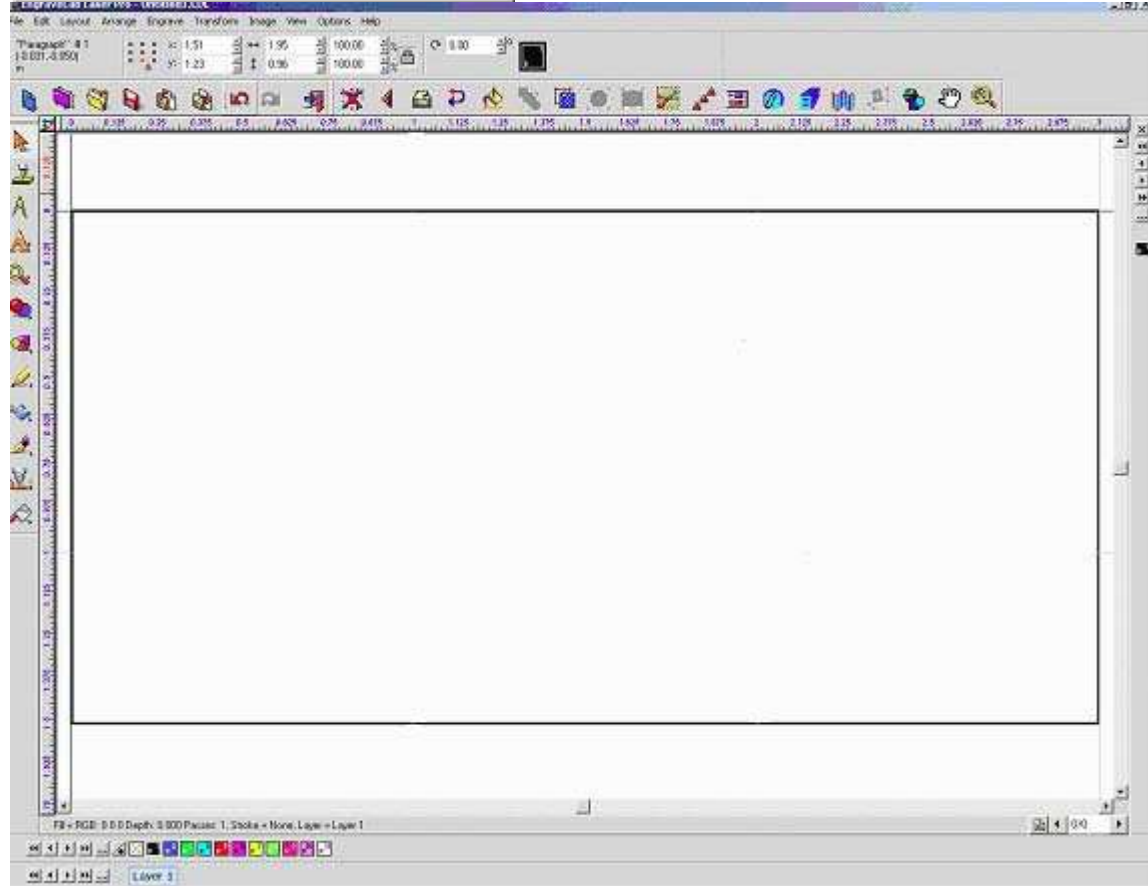
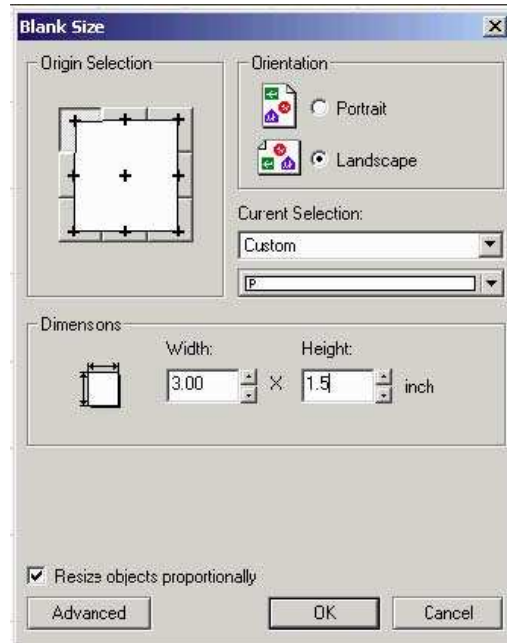
Plate Size

The **Plate Size** was set to the dimensions of one plate. This was done by selecting **Plate Size** from the **Layout** menu and setting the following:

- ⌚ Set **Current Selection** to **Custom**
- ⌚ Set **Orientation** to **Landscape**
- ⌚ Click the upper-left quadrant of the **Origin Selection**
- ⌚ Set **Width** to 3.00 inches
- ⌚ Set **Height** to 1.50 inches

The **Plate Size** dialog should appear as follows: Click the **OK** button to accept the changes, and the view will return to the **Sign Plate**. Note that the ruler dimensions correspond to the changes that you have made.

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Setting the font properties

On the workspace, a single plate design must be created that will be used as a basis for creating multiple plates. At the left of the workspace, choose the **Frame Text Compose** button from the **Text Tools** flyout.



Click within the Sign Plate, and a text frame will be created that fits the dimensions of the Sign Plate. Also notice that the SmartBar controls that appear at the top of the workspace can be used to modify your text editing options.

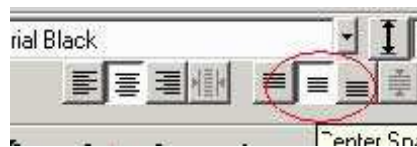
Center Justify

From the SmartBar controls, click the **Center Justify** button.



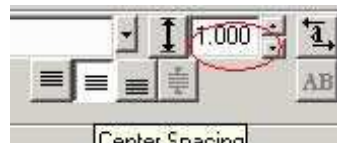
Center Spacing

Again from the SmartBar, click the **Center Spacing** button.



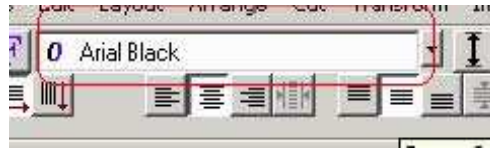
Font Height

Set the **Font Height** to 0.250 inches.

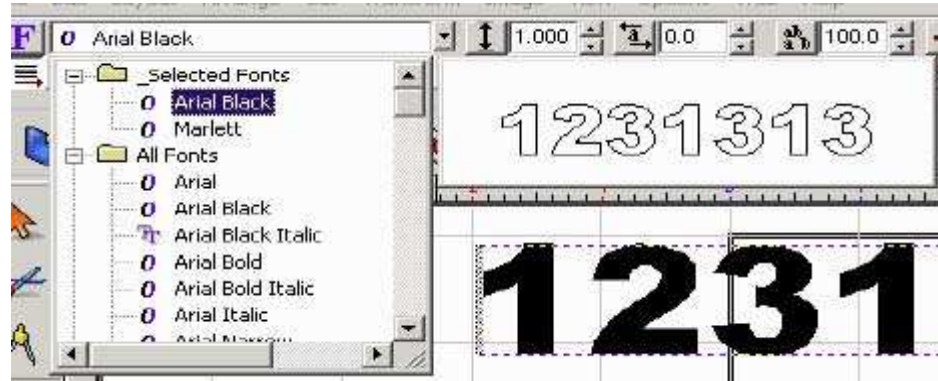


Font Picker

Click on the **Font Picker** to display a list of available fonts.



The most recently used fonts will be displayed, and more fonts are available by double-clicking the **All Fonts** folder.

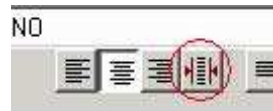


From the **All Fonts** list, search for the font called **DINO**. When this font is found, double-click to select it. The **Font Picker** window will close, and **DINO** will become the current font.



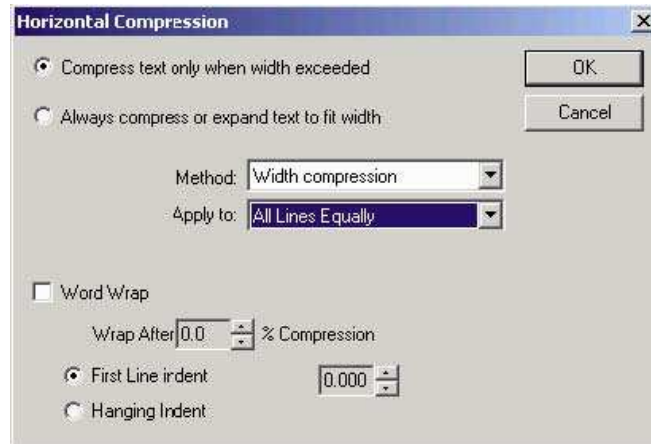
Setting the Text Frame Properties

From the SmartBar, click the **Horizontal Compression** button.



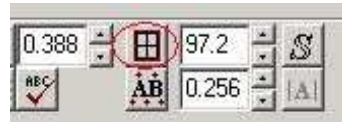
The **Horizontal Compression** dialog will open. Use the following settings: A) Enable the “**Compress text only when width exceeded**” option B) Set the Method drop-list to “**Width compression**” C) Set the Apply drop-list to “**All Lines Equally**” D) The **Word Wrap** option should be unchecked

The **Horizontal Compression** dialog will appear as follows:

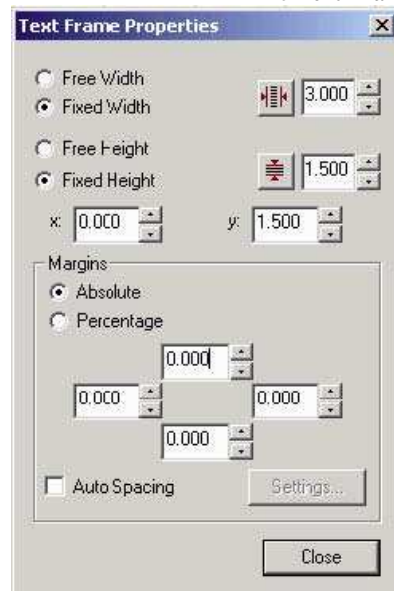


As mentioned earlier, our text frame is equal in size the Sign Plate. Later, when we are substituting badge text, the **Width Compression** setting will prevent substituted text from exceeding the text frame, which prevents the Sign Plate boundaries from being exceeded. Also note that the compression will be applied to **All Lines Equally**. For the given text frame, if one line of text exceeds the text frame boundaries, then all lines for that text frame will be compressed to the same extent. The benefit of this is that all text lines in the layout will have the same width and kerning characteristics, regardless of the text height in each line.

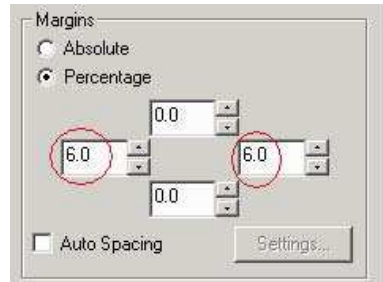
Click **OK** to close the **Horizontal Compression** dialog. From the SmartBar, click on the **Frame Properties** button.



The **Text Frame Properties** dialog will open.



For the **Margins**, click the **Percentage** option, and then set the left- and right-margins to 6.0 each.



Click the **Close** button to accept the changes made in the **Text Frame Properties** dialog.

Creating the plate text

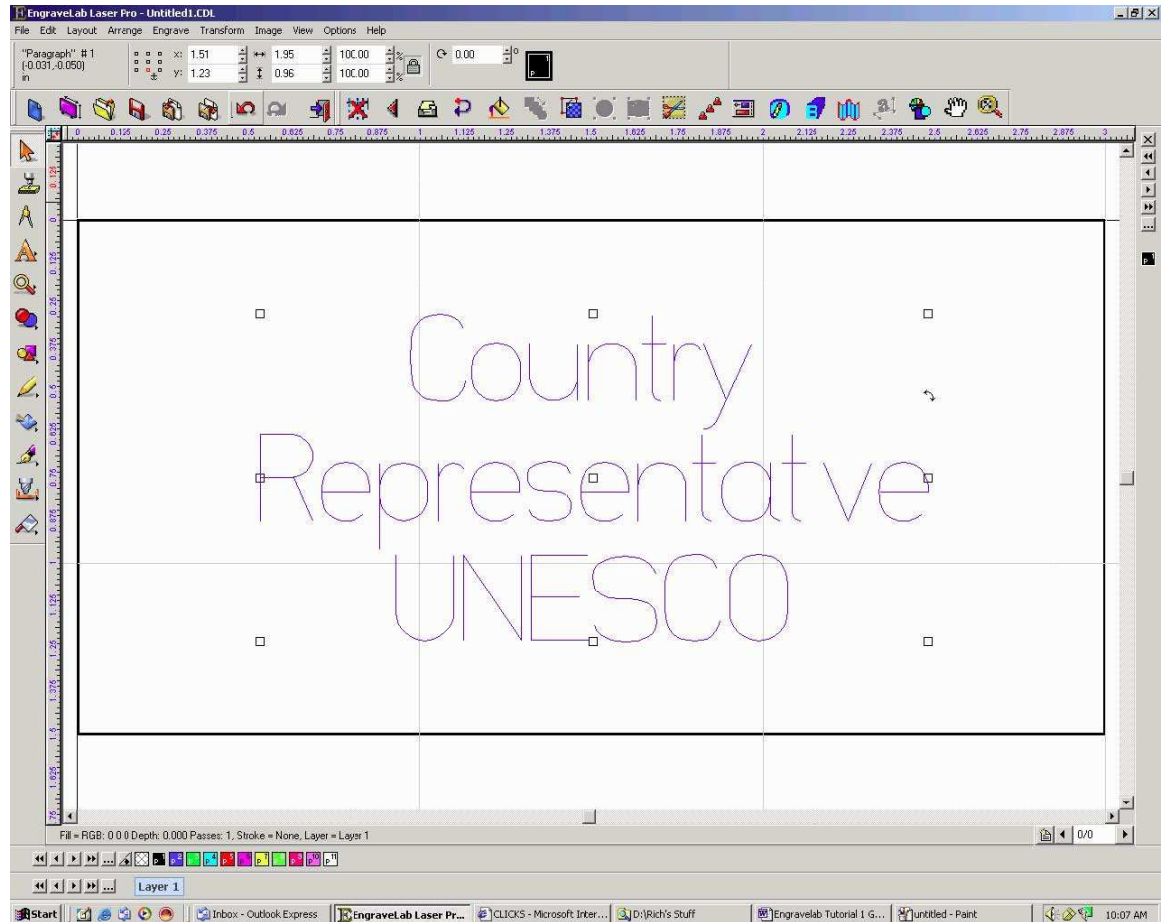
We are now ready to begin typing text for the plate, and we will type three lines of text. After typing the text for the first two lines, remember to terminate the line by pressing the **Enter** key. As part of this example, try to make one of the text lines extend to the edges of the plate. By doing so, you will notice that all three text lines will be automatically compressed.

Note: When we are later using the **Badges** dialog to choose replacement text, the replacement text fields will be arranged according to the order that text shapes were created on the workspace (i.e. database order). Take care to create text fields in the same order as the fields in the **Replacement Data File**.

After typing three lines, use the mouse to click on the **Select** tool.



The resulting plate should appear somewhat like the following:



Adjusting the text spacing

In some cases, it may be desirable to adjust the spacing between the lines of text.

- ⌚ From the **Edit** menu, choose the **Select All** item.
- ⌚ Again from the **Edit** menu, choose the **Edit Text** item. The plate text will now be in an editing mode. Note that the cursor will be a vertical line placed before the first letter of the first line.
- ⌚ In order to change the spacing between all lines of text, all three lines of text must be selected or highlighted. To select all the text, use the key combination of [Shift + Control + End]. The selected text will become inverted, such that it appears to have a black highlight.
- ⌚ From the text controls, set the **Line Spacing** to 155%, such that extra space is inserted between each line.

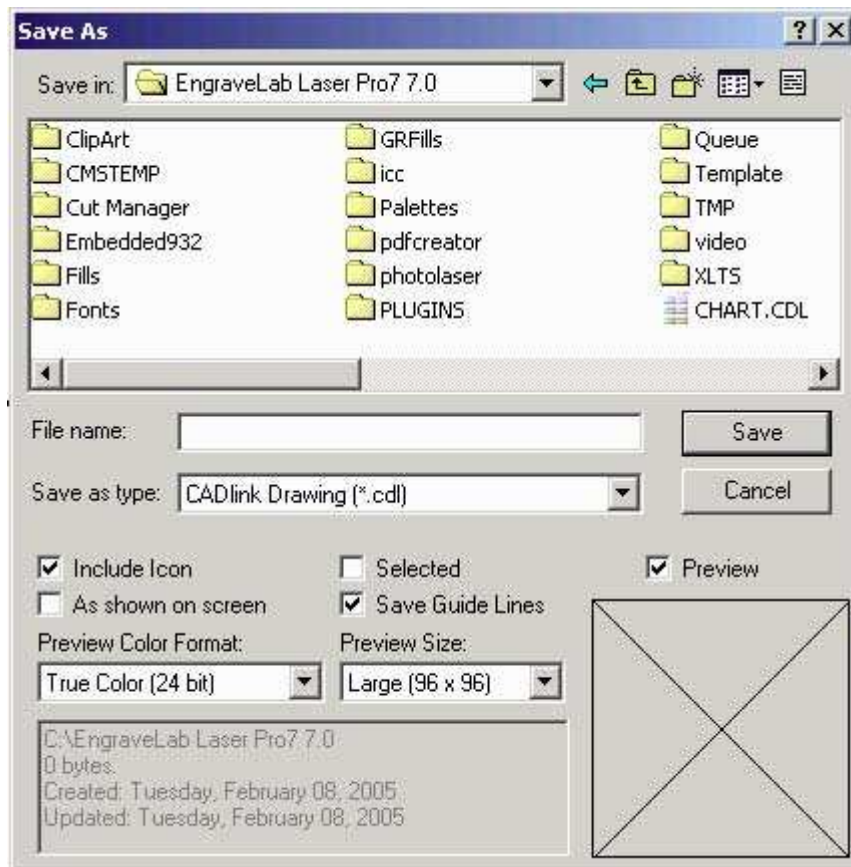


To accept the changes, click the **Select** tool.



Saving the file

From the **File** menu, choose the **Save** item. Since this workspace had not been previously saved, the **Save As** dialog will appear. By default, the **Save in** directory should be the Vision Pro directory. If this is not the current directory, then it will be necessary to browse for the correct directory.



For the **File name** field, replace the text with "**badge**", which will become the filename for this saved workspace. Click the **Save** button to continue, and the workspace will be saved.

Creating badge data

Now that plate text has been arranged in preparation of creating badges, some badge data may also be prepared. For badge data, create a text file ("MemberStates.txt") that contains the countries and names of people that will be listed on the badges. For this example, twelve

entries were created, where each line was formatted as follows:

```
[Country][TAB][Representative]
```

Only one [TAB] character was inserted on each line. When the Vision Pro Badges feature reads the file, each [TAB] character will be used as a delimiter between the [Country] and [Representative] fields. Using this formatting, the resulting text file was created:



```
Untitled - Notepad
File Edit Format Help
Algeria Me Mohammed BEDJAOUI
Australia      Mr Kenneth WILTSHIRE
Bahamas Mr Davidson HEPBURN
Bangladesh      Mr Mohammed shahidul ALAM
Belarus M. Uladsimir SHCHASNYY
Benin Mr Olabiyi B. J. YAI
Brazil Mr Jose Israel VARGAS
Burkina Faso Mr Laya SAWADOGO
Chad Mr mahmoud Hissein MAHMOUD
Chile M. Jaime LAVADOS
China Mr ZHANG Xinsheng
Cuba Mr Miguel BARNET LANZA
```

More entries could have been created, but our badge examples will only use the first twelve entries.

Note: The order of fields in the text file should correspond to the order of text shapes on the Vision Pro workspace. This will allow the **Badges** dialog to substitute text in the correct order.



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