# Welcome to your SignBlazer5 Learning Guide

a seven hour journey to produtivity

SignBlazer5 SignBlazer5 Pro SignBlazer5 HotShot

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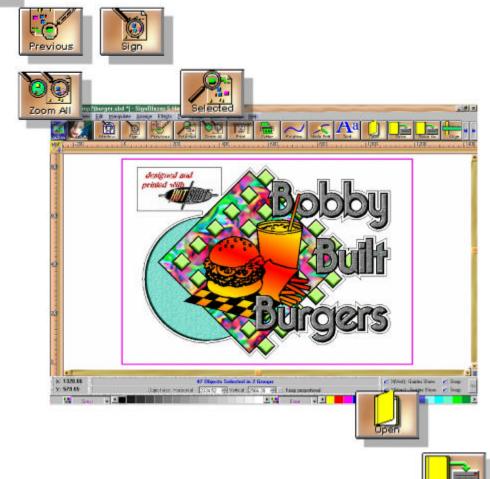
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### HOUR 1

#### Let's Begin

Installing the Program see Note i

- A1 Starting and closing the Program
- A1 Starting a New Work
- A2 Setting the Work Space Size
- A3 Getting Help

#### The Program Window

- B1 Program Window Features
- B2 Customising Your Work Space
- B3 Moving Around the Work Space
- B3 Setting Up the Grid
- **B3** Moving the Work Space Origin
- B4 Viewing the Work Space
- B4 Zoom Extents
- **B5** Zooming Using the Mouse
- B6 Creating and Using Guide Lines
- B7 Guide Line Options
- B8 Background and Wireframe Modes

#### Handling Files

- Starting a New Sign (see A1)
- C1 Opening Saved Files
- C1 Opening a File as a Background
- C1 Opening a File as a Template
- C2 Saving Your Work
- C3 Naming Files and Creating Backups
- C4 Using File History
- C5 Importing Files
- C6 Exporting Files
- C7 File Control Options
- C8 Sending Files by Email

### The Toolbar

- D1 Using the Toolbar
- D1 Customising the Toolbar
- D2 The Popup Tool Palette

#### Selecting Objects

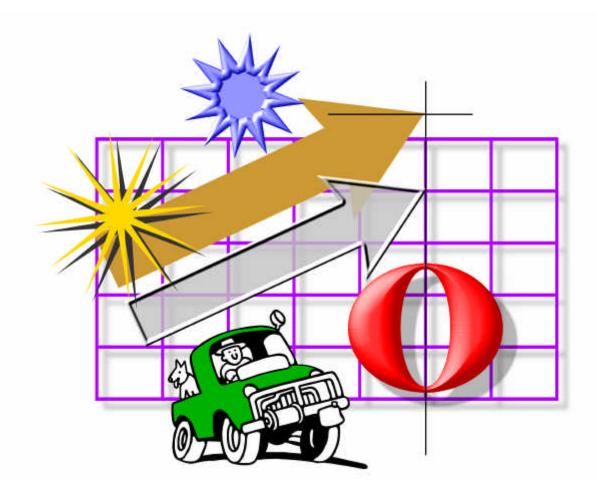
- E1 Single Objects
- E1 Selecting Objects by Color
- E2 Multiple Objects
- E3 Obscured Objects

#### **Moving Objects**

- F1 Moving Objects
- F2 Moving Objects Using the Grid Moving Using Guidelines (see B6) Group Before Moving (see G1)
- F3 Making an Exact Move
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- **F5** Cutting & Pasting
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#### **Grouping & Arranging**

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### HOUR 2

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- H1 Taller or Shorter
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- J5 Ellipses
- J6 Hollow Circles and Ellipses
- J7 The Polyline Toolbox
- J8 Drawing Polygons and Stars
- J9 Drawing Arrows
- J10 Adding Dimensions
- J11 Drawing a Grid
- J12 Drawing Registration Marks

#### **Copying Objects**

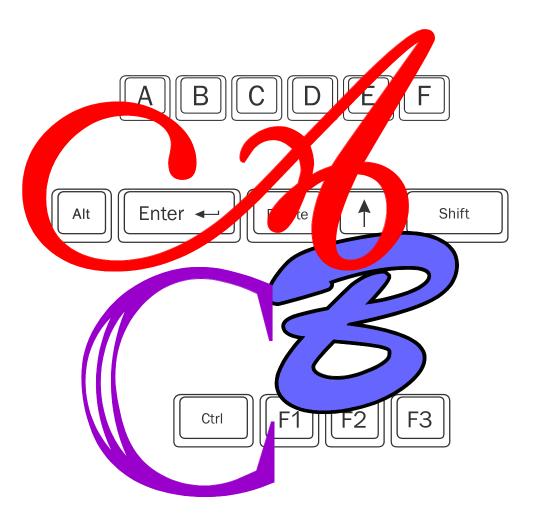
- K1 Duplicating Objects
- K1 Replicating Objects

#### **Using Color Options**

- L1 Choosing ColorWhiz<sup>™</sup> Palettes
- L1 Changing an Object's Color
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- N3 Justification
- N3 Superscripts & Subscripts
- N3 Case Mode
- N3 Bold and Italic Fonts
- N3 Using 'Setup' to Store Selections
- N4 Spell Checking Setting:
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- 04 Reverse Masking
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- W2 Color Blend
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- W6 Drop Shadow
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- W7 Special Effects
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- V2 Using Inline/Outline
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- V7 Color Trapping
- V8 Keyline
- V8 White Space
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#### **Cutting Your Work in Vinyl**

AA11	First Time Setup
AA2	Setting Up the Cutter - 1
AA3	Setting Up the Cutter - 2
AA4	Cutter Toolbar and Screen
AA5	Vinyl Cutting Options - 1 (Saving Space)
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AA7	Vinyl Cutting Options - 3 (Registration Marks, Orientation)
AA8	Sending Data to Your Cutter
AA9	Using VinylSaver <sup>™</sup>
AA10	Cutting Large Signs - Tiling Options
AA11	Using the Cut Manager
AA12	Cutting Prints - 1
	<ul> <li>Creating a Cut Mask Around a Bitmap</li> </ul>
AA13	Cutting Prints - 2
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AA14	Cutting Prints - 3
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- Y1 Print Registration Marks
- Y1 Selecting the Colors to Print
- Y2 Printer Selection and Setup
- Y3 Windows Printer Driver Setup
- Y4 Fitting Work to the Page
- Y5 Printing a Grid
- **Y5** Starting the Print
- Y6 Large Format Printing
- Y7 Color Management Printer Output Options

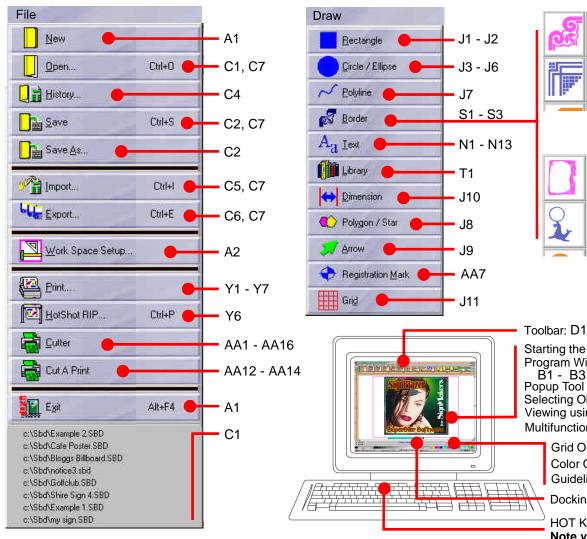


#### **Technical Notes:**

- i Program Installation
- ii System Requirements & Recommendations
- iii Producing Artwork in Other Programs
- iv Notes For Users of CorelDRAW! 4
- Importing Graphics Files from Macintosh and PC Programs
- vi Using Photoshop Plugins
- vii Hot Key (Shortcut) Summary



### SignBlazer5 HotShot



Corner Styles S1 - S2

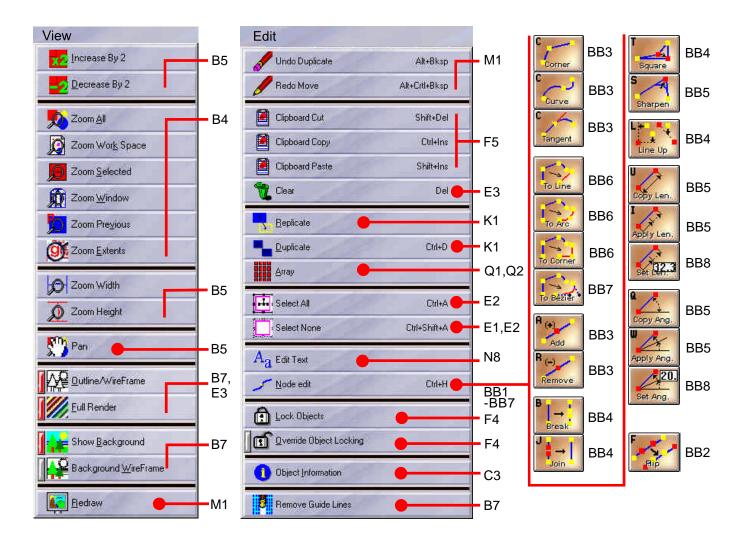


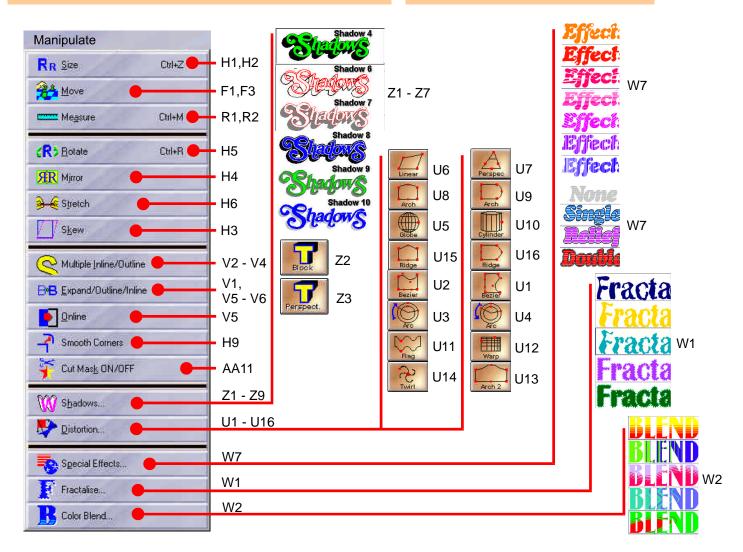
Toolbar: D1, D2 Starting the Program: A1 Program Window Features: B1 - B3 Popup Tool Palette: D2 Selecting Objects: E1, E2 Viewing using the mouse: B5 Multifunction T-Bar<sup>™</sup>: I1 - I5 Grid Options: B3, F2

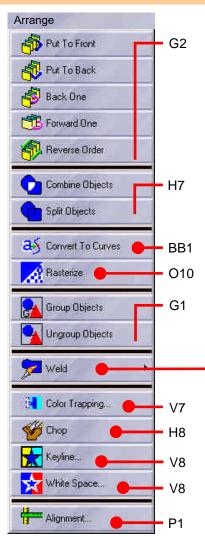
Color Options: E1, L1, L2 Guideline Options: B6 - B7

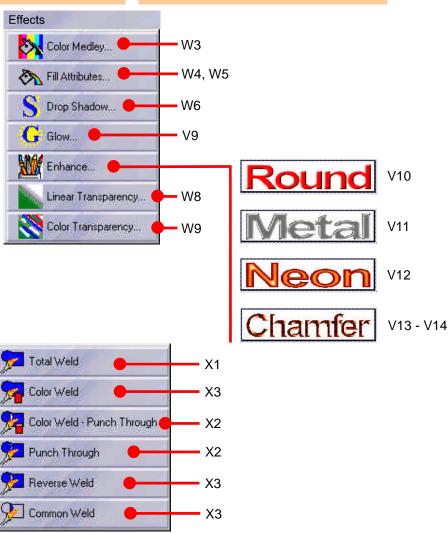
Docking Toolbar: L3, L4

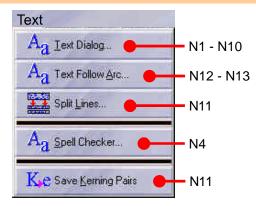
HOT KEY SUMMARY: Note vii

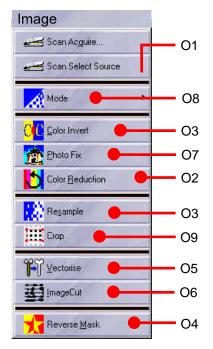


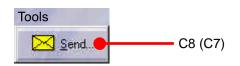


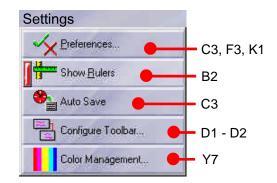




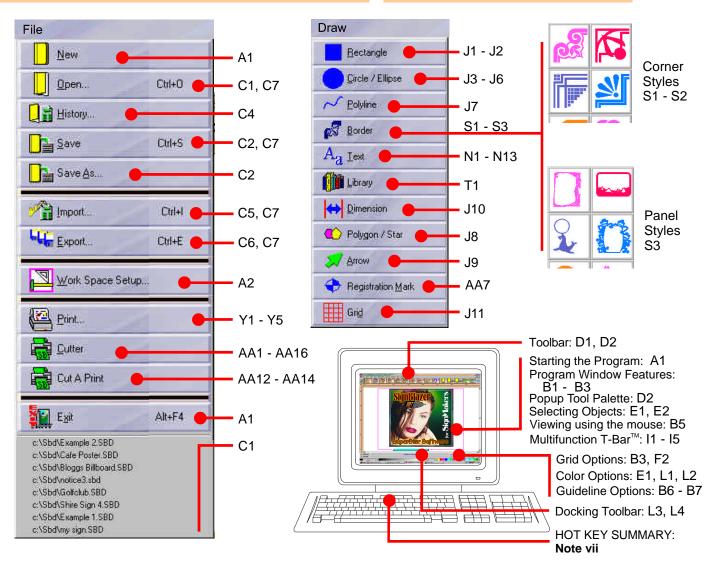


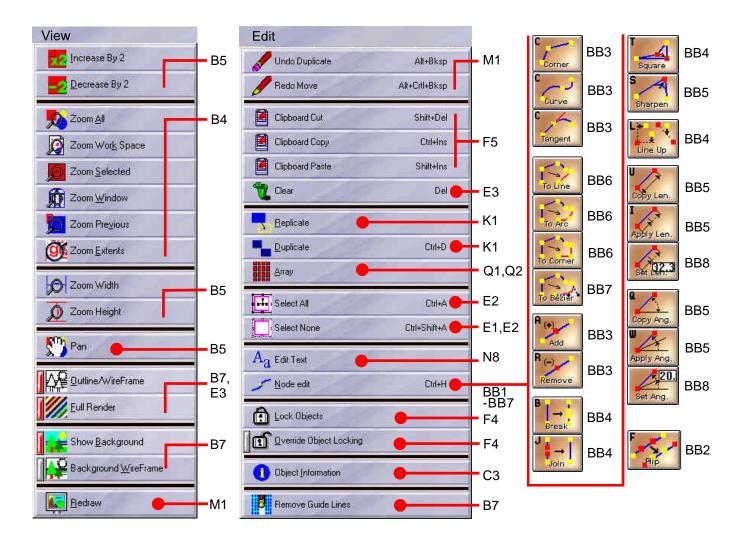


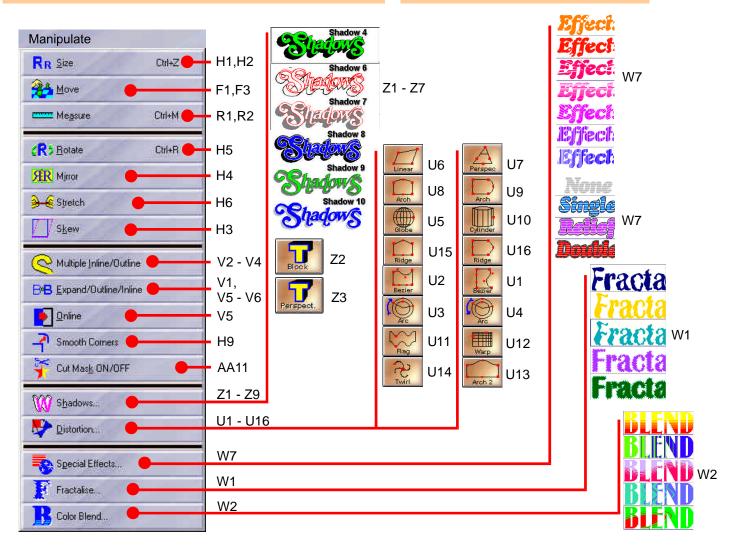












### SignBlazer5 Pro

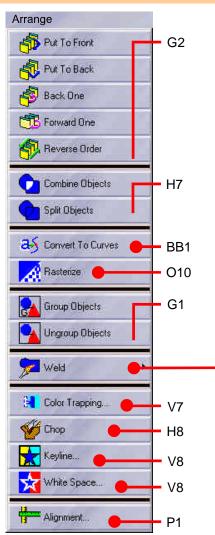
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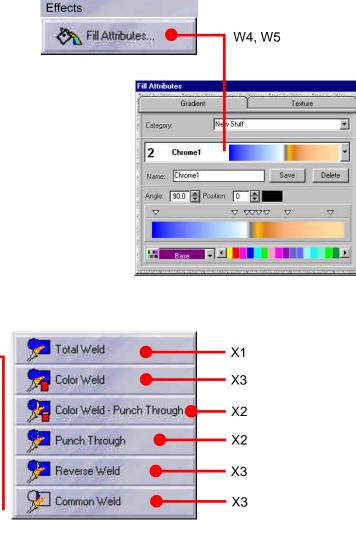
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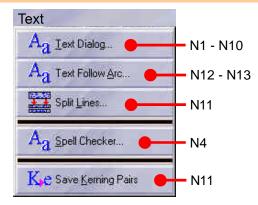
Cancel

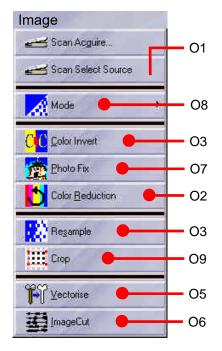
Help

Preview

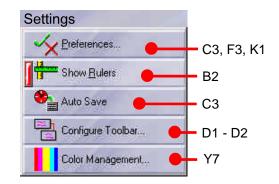




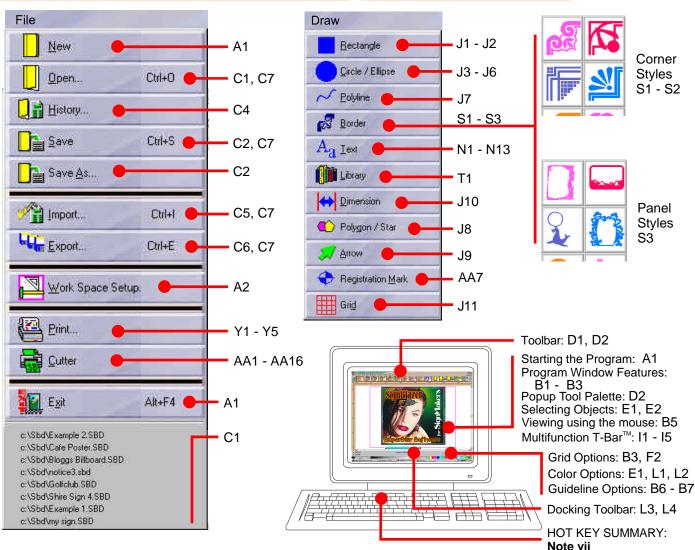


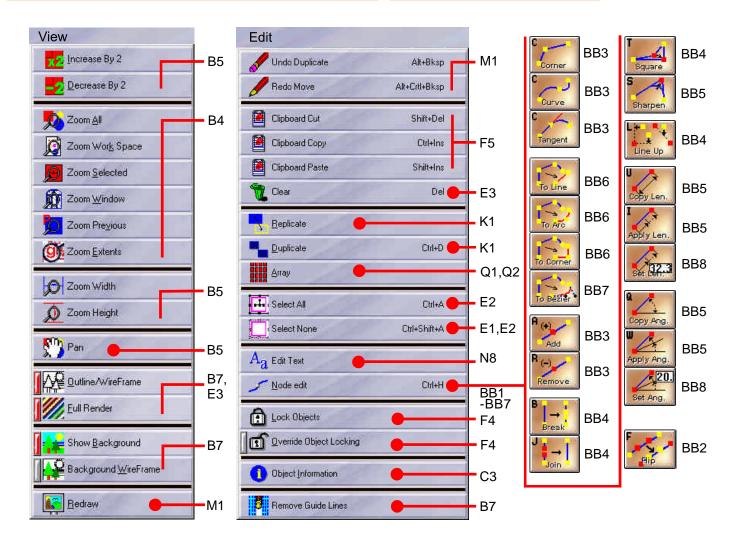


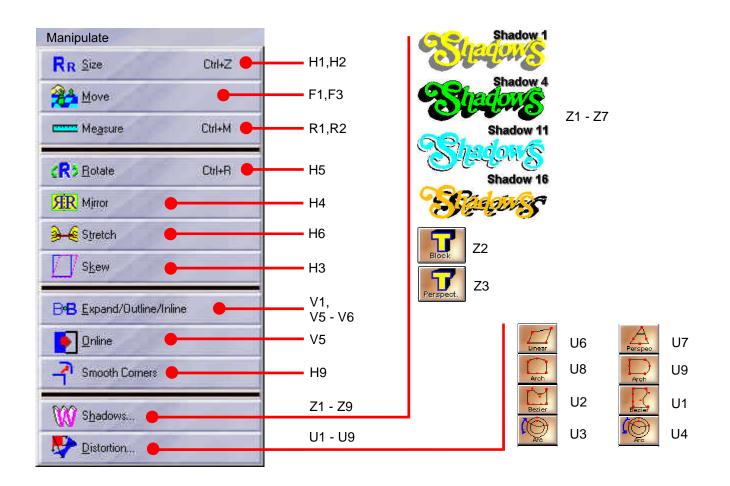


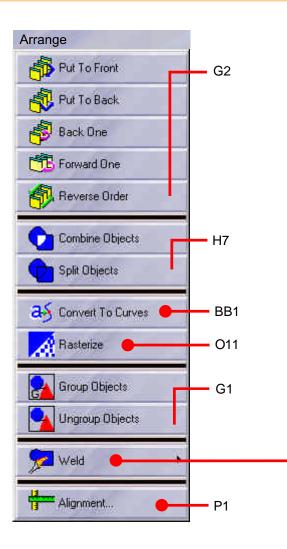


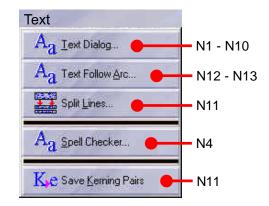


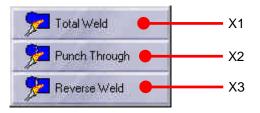


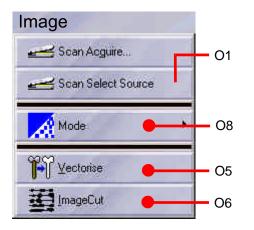


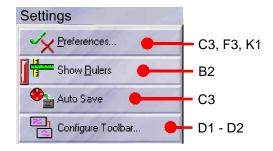


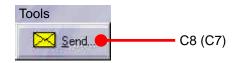


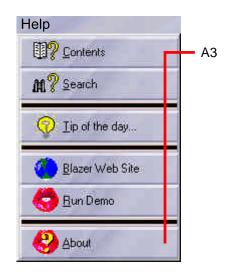












### HOUR 1

#### Let's Begin

Installing the Program see Note i

- A1 Starting and closing the Program
- A1 Starting a New Work
- A2 Setting the Work Space Size
- A3 Getting Help

#### The Program Window

- B1 Program Window Features
- B2 Customising Your Work Space
- B3 Moving Around the Work Space
- B3 Setting Up the Grid
- **B3** Moving the Work Space Origin
- B4 Viewing the Work Space
- B4 Zoom Extents
- **B5** Zooming Using the Mouse
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- B7 Guide Line Options
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- C1 Opening a File as a Template
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- C5 Importing Files
- C6 Exporting Files
- C7 File Control Options
- C8 Sending Files by Email

### The Toolbar

- D1 Using the Toolbar
- D1 Customising the Toolbar
- D2 The Popup Tool Palette

#### Selecting Objects

- E1 Single Objects
- E1 Selecting Objects by Color
- E2 Multiple Objects
- E3 Obscured Objects

#### **Moving Objects**

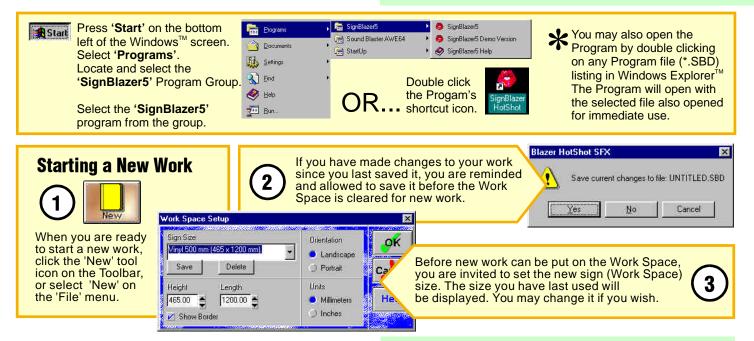
- F1 Moving Objects
- F2 Moving Objects Using the Grid Moving Using Guidelines (see B6) Group Before Moving (see G1)
- F3 Making an Exact Move
- F3 Nudging
- F4 Locking and Unlocking Objects
- **F5** Cutting & Pasting
- F6 Copying To and From Other Applications

#### **Grouping & Arranging**

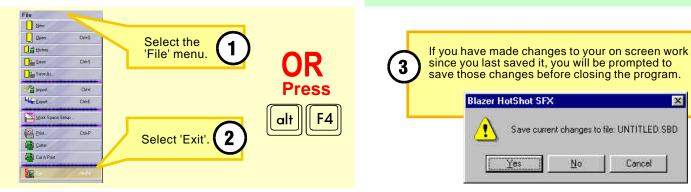
- G1 Grouping
- G1 Ungrouping
- G2 Assigning Objects to Layers

### Learning Guide

#### **Starting the Program**



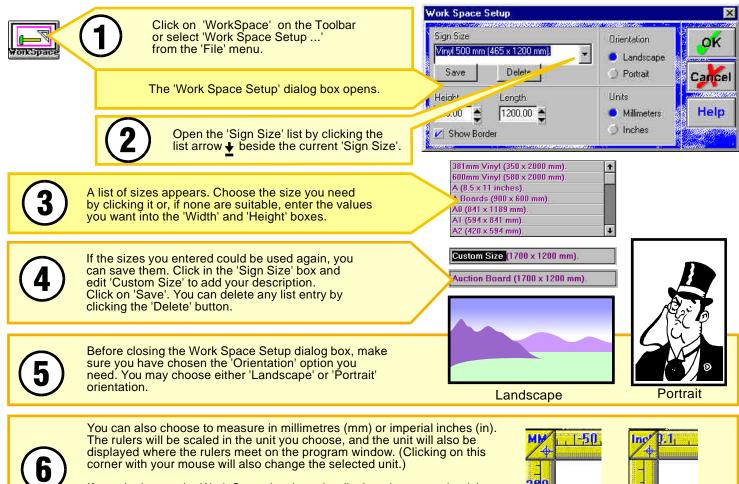
#### **Closing the Program**



PAGE A1

### Setting up a Work Space

The first step in the layout of your work is setting the correct sign (Work Space) size.

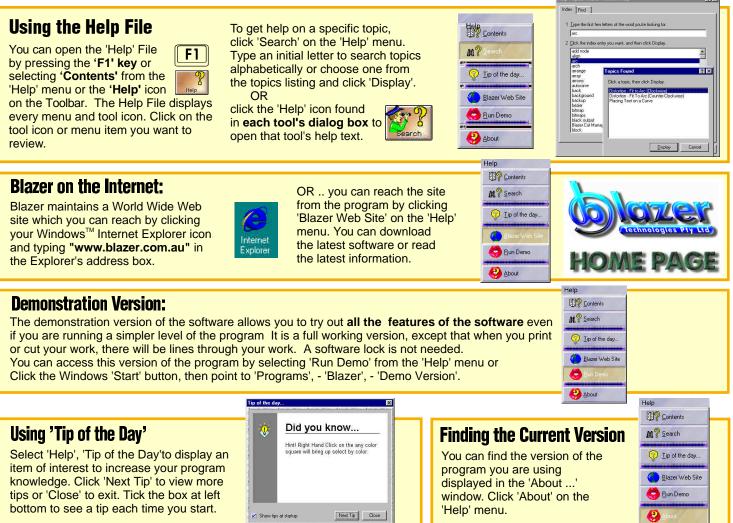


If you don't want the Work Space border to be displayed, remove the tick from the "Show Border" option box in lower left corner of the window.

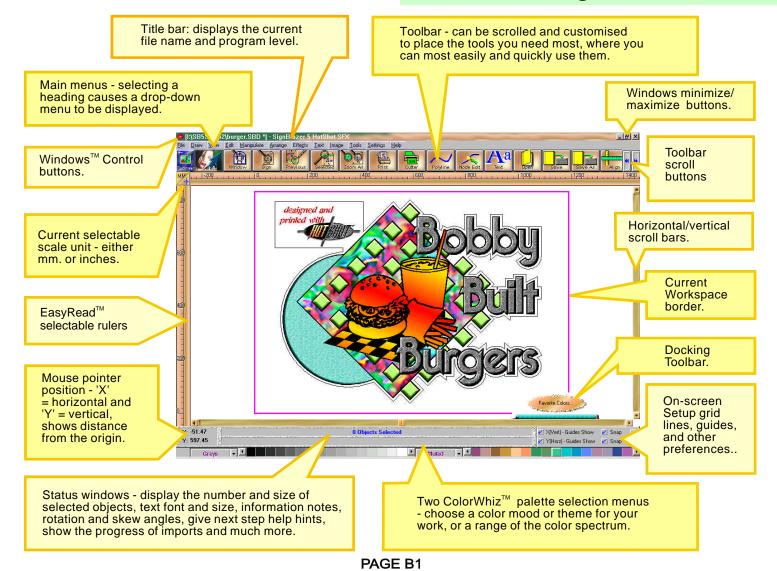


### **Getting Help**

Help is never more than a click or two away ...

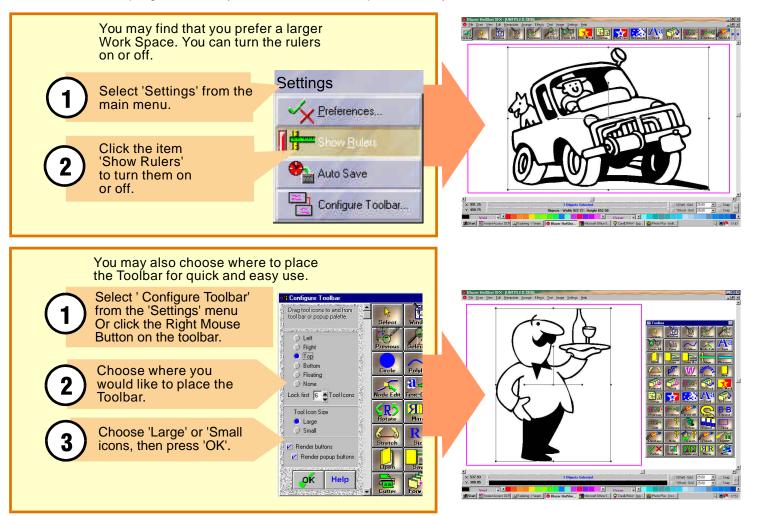


### A Tour Around the SignBlazer Screen



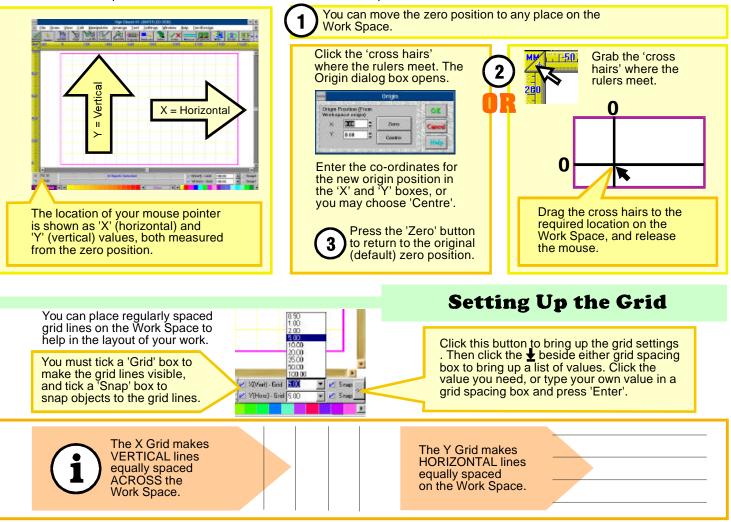
### **Customizing Your Screen**

A Work Space suited to your preferences can make your work more comfortable and efficient. This program allows you to alter the Work Space to suit your needs . . .



#### Moving Around The Work Space

This program follows the standard method of naming locations on the screen. The default zero position is at the bottom left corner of the Work Space border.



are visible in the program window.

In the process of laying out your work, it is necessary to be able to enlarge small details as well as view the whole design. The **Toolbar**, the **View Menu** and the **Function Keys** have tools you can use to see areas of interest on the Work Space.

Zeen All

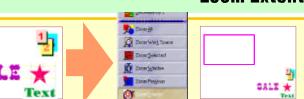
Previous

The View menu item 'Zoom Workspace' or the 'Sign' ex tool or Function Key F8, all cause the Workspace View menu 'Zoom Selected', the 'Selected'Tool to fill the screen. or the Function Key 'F10', enlarges any selected object to fill the program window. 4 Zoon All **CANK** Text To view an area of interest, click the 'Window' tool, or View menu 'Zoom Window' or press Function Key The 'Zoom All' tool or View menu item or Function 'F4'. Drag a box around the area you want to view Key 'F7', rescales the screen so that all objects and click again to enlarge the area to fill the

The View menu item 'Zoom Previous', the 'Previous' tool or the Function Key 'F9', allow you to switch back and forth between views, perhaps a detail and your complete work.

program window.

Selecting 'Zoom Extents' on the View menu allows you to view all objects including the **Workspace border** itself as an object. This can be useful for instance, when moving remote objects back to the Workspace.

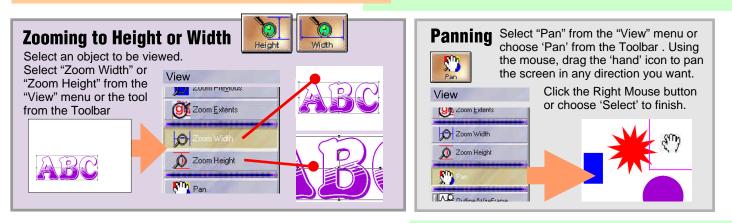


### **Zoom Extents**

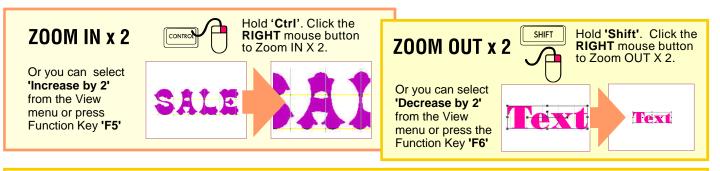
**Viewing The Work Space** 



### **Viewing The Work Space**



### Zooming Using the Mouse

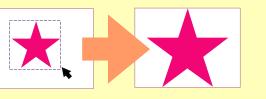


#### **MOUSE 'WINDOW' ZOOM**

You can also use the mouse to select an area for closer viewing which acts the same as the 'Window' tool.

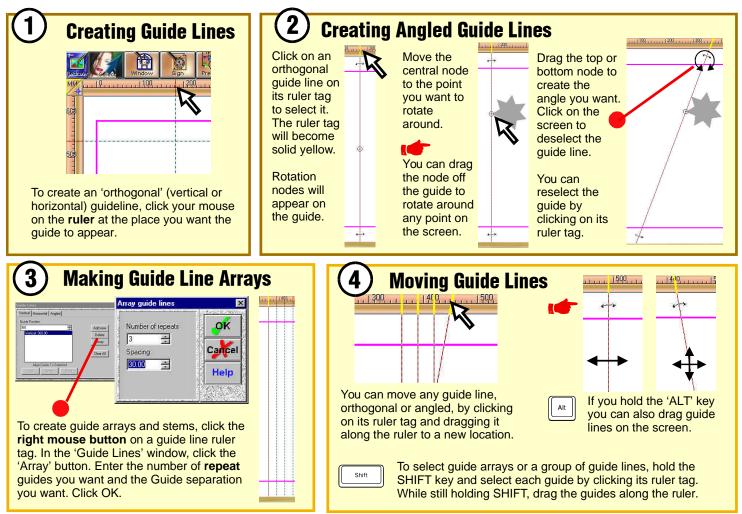


Hold the **'Shift'** key. Click and hold the **RIGHT** mouse button and drag a box to enclose the area you want to see in detail. Then release the mouse.

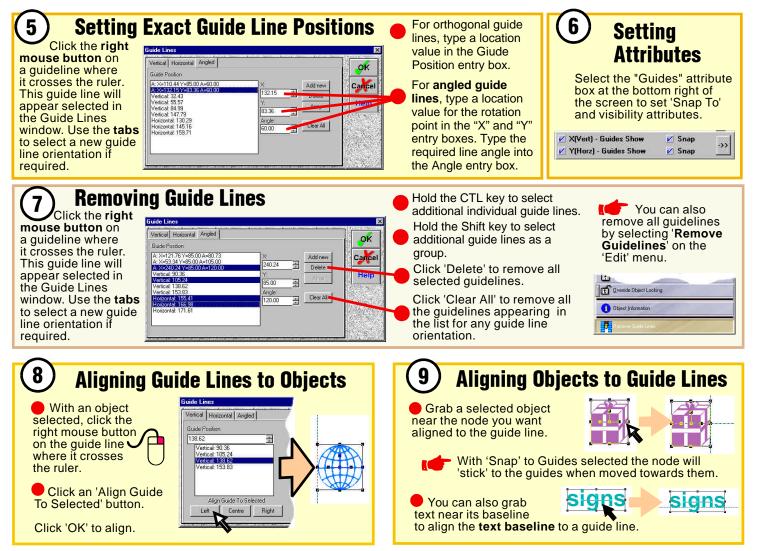


### Creating and Using Guide Lines

Although you can place grid lines onto your Work Space, often you will need lines which are not evenly spaced and are easily moved. You can easily set, move and delete guidelines as you need them.



### Creating and Using Guide Lines



### **Background and WireFrame Modes**

There are several viewing modes that can assist when doing complex graphics

**Outline/Wireframe** viewing mode allows you to display only the outlines of objects without their fill colors.

Using this mode you can see objects otherwise obscured by other artwork and you can more easily select components of your drawings.



You can turn the mode on and of using 'Cntl' + 'F' keys or by selcting 'Outline/Wireframe' from the 'View' menu. A bar on the menu item's left glows red when the mode is active.



Ì	View
	12
	Pan 💦
	Outline/WireFrame
	Eull Render
	Show Background
	Background WireFrame
	Redraw

**'Full Render'** allows complex bitmap graphic effects to be displayed on the screen (e.g. 'bitmap masking', transparency, enhancements and fills) and must be selected for them to be viewed correctly. (If no bitmap effects are included in your work unselecting this option will speed up the redisplay of nonrendered objects)



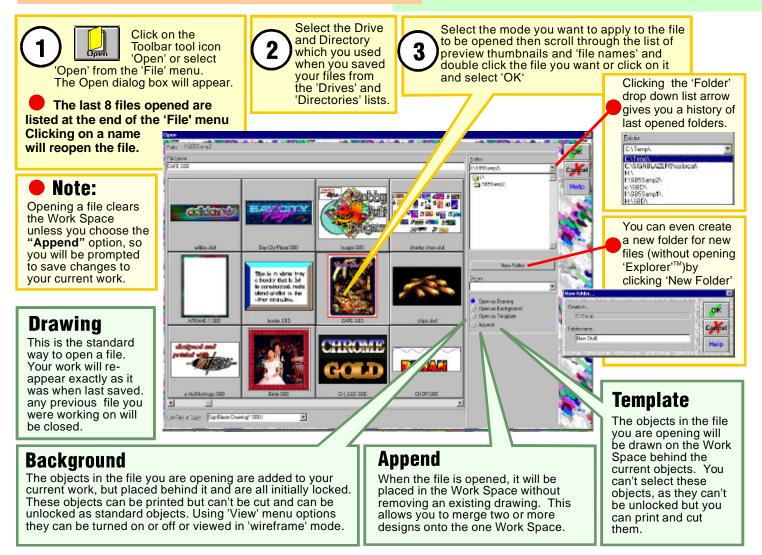
You can turn 'Full Render' on or off by pressing 'Cntl' + 'F' keys, or selecting 'Full Render' by selecting the item on the 'View' menu. A bar on the item's left will glow red to indicate that 'Full Render' is currently active.



If you have opened a file as a background you can turn the background on and off by simply selecting **'Show Background'** from the 'View' menu. A bar on the left of the menu item glows red when the mode is active. When turned off, the background file will not appear on the screen and will not be printed.

It is convenient sometimes to view a background file as a 'WireFrame'. This still allows you to see the background, while getting a clear view of any work in the Work Space. To view the background in WireFrame mode, select **'Background WireFrame'** from the 'View' menu. A bar on the left of the menu item glows red to indicate that 'Wireframe' mode is active. To view the background in solid mode, select this item again.

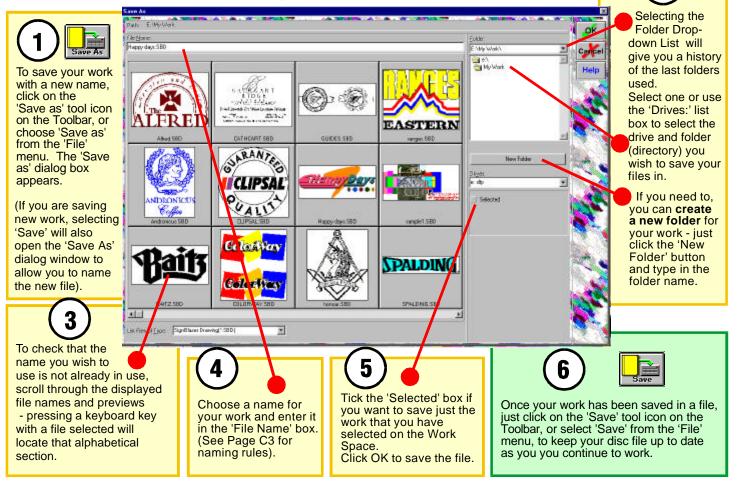
### **Opening Saved Files**



### **Saving Your Work**

It is good policy to save all your work. You can always delete files later if you decide not to keep them.

The first time you save a new sign, use 'Save' or 'Save as' to give your work a file name. You can also choose 'Save as' to save versions of your work under other names for later recall.



### Saving Your Work Naming Files

Under earlier versions of Windows<sup>™</sup> (like Windows 3.1) you were limited to 8 characters when naming your files, and you could not use some characters such as the 'Space' character in a name. When naming files or file folders in 32bit versions of Windows<sup>™</sup>,

(Windows 98/ME/2000/NT etc.) you can use up to 256 characters **and include spaces**. The only character you should not use is the 'Full Stop' as the system will consider following characters as a file extension (like 'sbd' or 'tif')

You do not need to type in '.sbd' after typing in a new file name as the program will add that for you.

Contents of 'E:\My Work'

😔 ranges.SBD

This is the stuff I did for Bloggs & Co before my holidays.SBD

### **Backup Options**

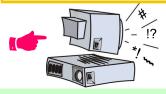
If the power fails to your computer you will lose any work done on the screen since you last saved it.



You can "Automatically Save" your work at set intervals. Choose "Auto Save" on the "Settings" menu. Tick "Enable"and enter an interval. (Avoid setting to '1 min' some very large files may take that long to save, leaving no time before resaving) To further protect your work, you can have the program save a copy of a file as a '**Backup**' file. If your current work should be accidently corrupted, you can find the backup file (named like '*myfile*.**BAK**') using Windows<sup>™</sup> Explorer and rename it to '*myfile*.**SBD'** 

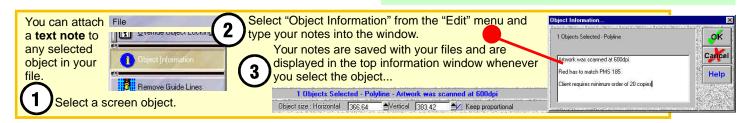
To use the backup system, tick the option you want in "Preferences" under the "Settings" menu.





Although modern computer hard drives have become much more stable, it is still good policy to **regularly copy all your working files** to some form of mass storage such as high capacity discs, data tape or writable CD's

# Saving Information in Files



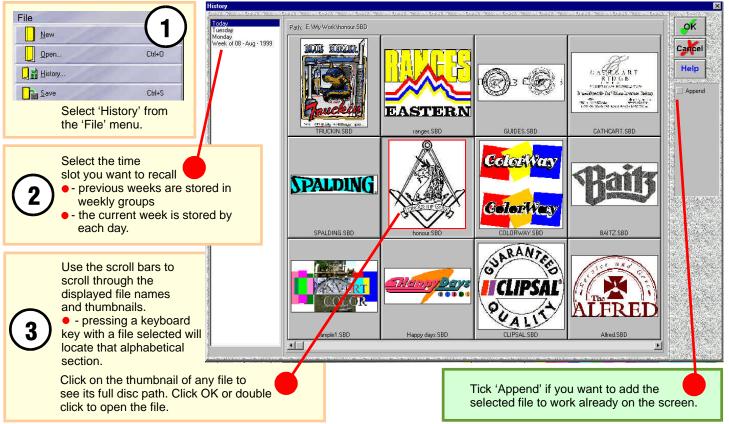
### **Using History**



#### What was that file I worked on last Monday? Where is the logo for Bloggs that I did last week?

'History' gives the answers.

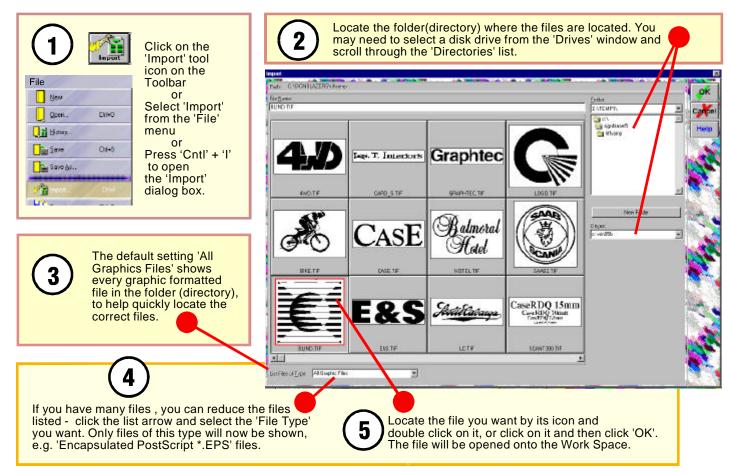
The Program's 'History' feature keeps a record of every file and file version you do - and keeps them in convenient catagories of time frame - previous weeks in weekly groups and then each day of the current week.



### **Importing Files**

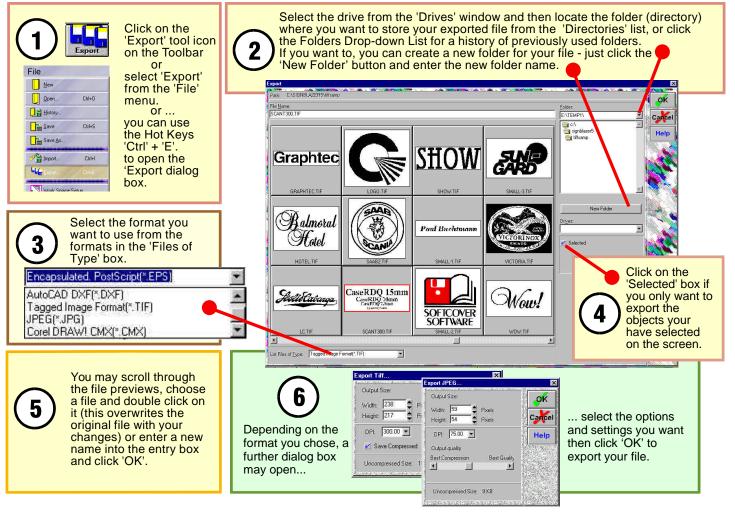
You can bring artwork, clipart and drawings created in other programs, directly onto the Work Space. A number of different formats are used by other programs to store their work in files.

A wide range of file formats such as 'EPS', 'AI', 'BMP', 'TIF', 'GIF', 'PCX, 'TGA', 'JPG', 'DXF', 'PCD', 'PCT', 'PSD' and 'CMX' are supported.

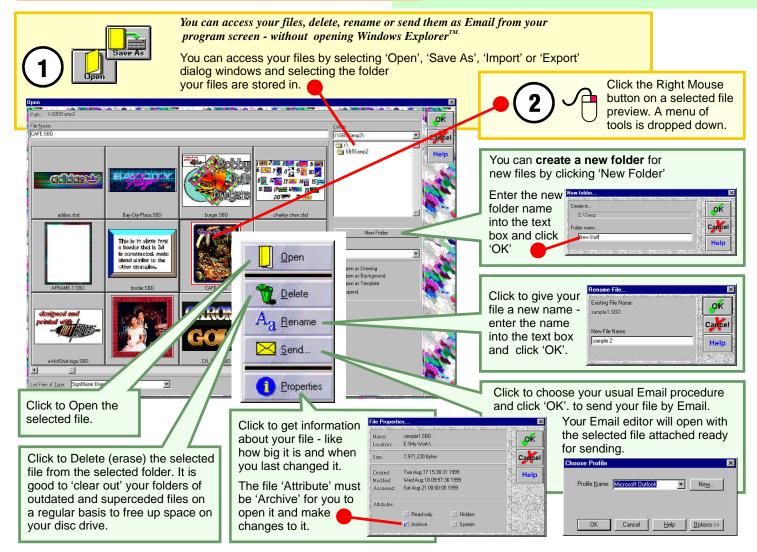


### **Exporting Files**

You can save your work in graphics formats other than '\*.SBD' and then import it in other graphics programs (such as CoreIDRAW or Adobe Illustrator.) The popular bitmap and vector formats 'EPS', 'TIF', 'DXF', 'JPG' and 'CMX' are supported



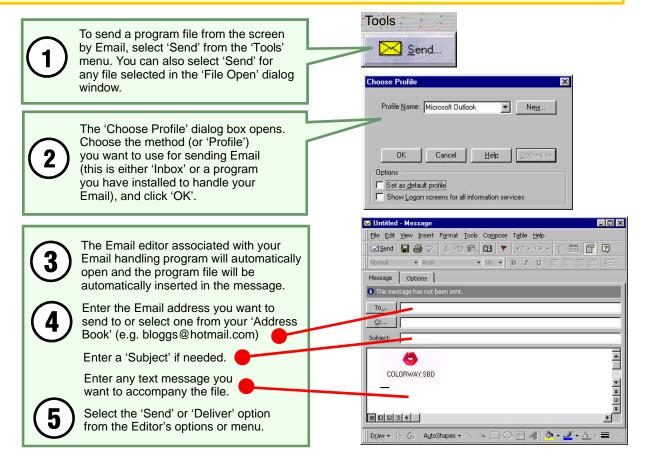
### **Organising Computer Files**



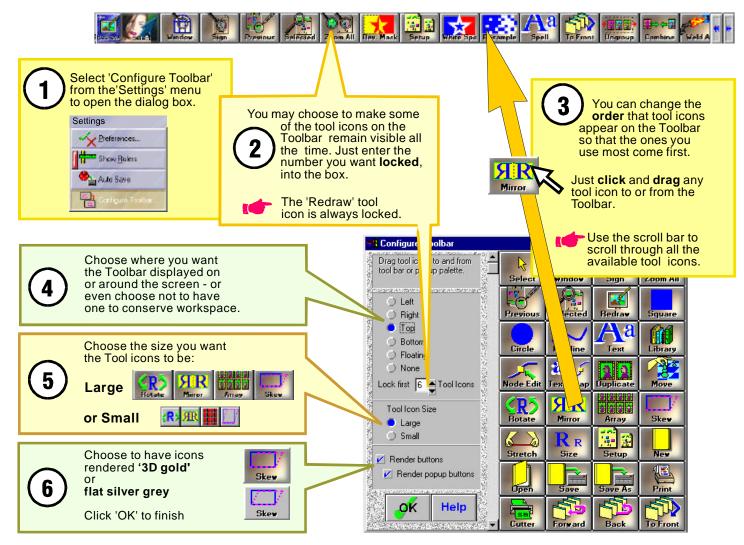
### Sending Files by Email

Before you can use the program's Email facility you need to have an Internet connection through an 'Internet Service Provider' and an Email account.

You also need a modem (Either internal or external) connecting your computer to the telephone service.



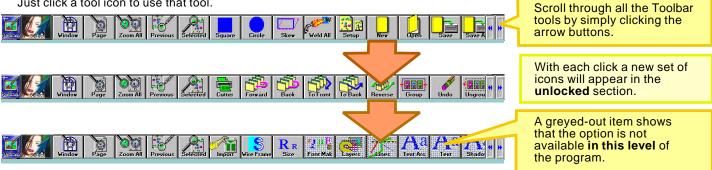
#### **Customising the Toolbar**



PAGE D1

### **Using the Toolbar**

The main Toolbar allows you to use the tools you need most, quickly and easily. Just click a tool icon to use that tool.



### **Customising the Tool Palette**

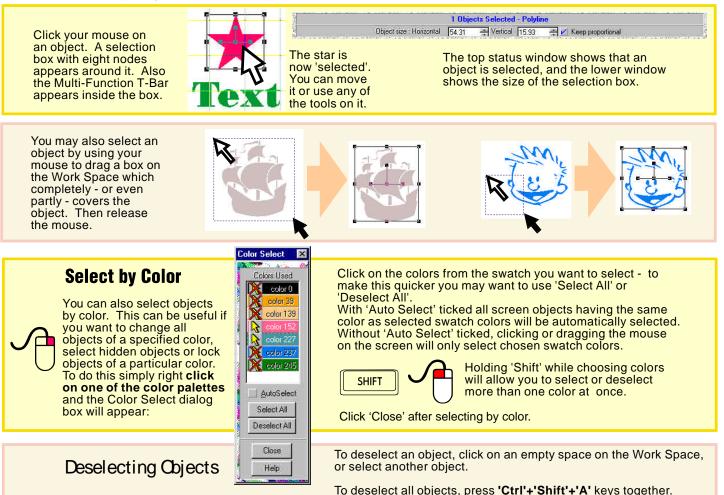
The Popup Tool Palette is a floating toolbox which appears on the screen when you click the Right Mouse Button on any empty Workspace area. You can customise it to suit your needs.

Select 'Configure Toolbar' from the'Settings' menu to open the dialog box or click the Right Mouse Button on the toolbar Settings Settings Settings Auto Save	Drag tool icons to and from tool bar or popup palette. Let Right Tog Bottom Ploating Lock first 6 Tool Icons	in the palette - in 3 columns of 7 rows Duplicate
2 Choose to display icons in '3D gold' or flat silver grey	Tool Icon Size       ● Large         ● Large       ● Bortate         ● Small       ● Bortate         ● Small       ● Bortate         ● Small       ● Bortate         ● Render buttons       ● Render popup buttons         ● Render popup buttons       ● Bortate         ● Render popup buttons       ● Bortate         ● Cutter       ● Bortate         ● Cutter       ● Bortate	Just click and drag any tool icon to or from the Palette. Click 'OK' to finish

PAGE D2

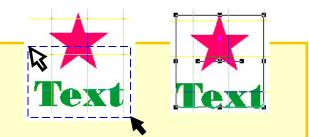
### **Selecting an Object**

You cannot do anything with an object until you 'select' it, there are various ways you can do this.



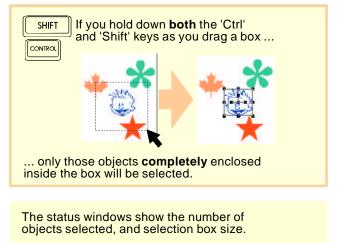
#### PAGE E1

### Selecting More Than One Object



Click to the top left of the objects and drag a box to at least partly cover the objects. Then release the mouse.

Every object falling **even partly** within the box will now be selected and a selection box will surround them all.





Objects you want to select together may be spread out with other objects in between ...



Press and hold the 'Shift' key.



Click on each object to be selected. A selection box forms around the objects. Only the objects you clicked on will be selected.

To **select all objects** at once, choose 'Select All' in the 'Edit' menu

... or press 'Ctrl' + A'



To **deselect all objects** choose 'Select None' in the 'Edit' menu

... or press Control +Shift+'A'





PAGE E2

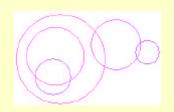
#### Selecting Objects Hidden Underneath Others

In the process of drawing, objects can become hidden beneath others.



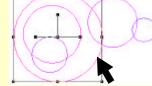
Selecting the 'Wireframe' tool icon from Toolbar revea

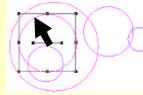
'Wireframe' tool icon from the Toolbar reveals all objects as outlines, with the outlines in each object's fill color.



You can then select objects inside the borders of others by holding the 'Cntrl' key

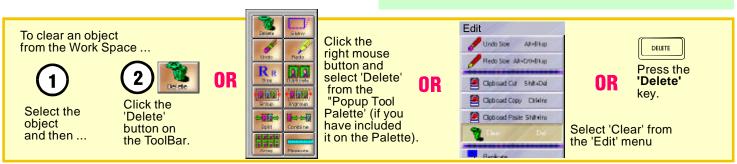
CONTROL





... and then clicking the mouse directly over an object's outline.

### Deleting

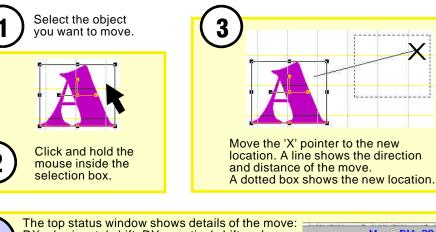


#### PAGE E3

### **Moving Objects**

Release the mouse

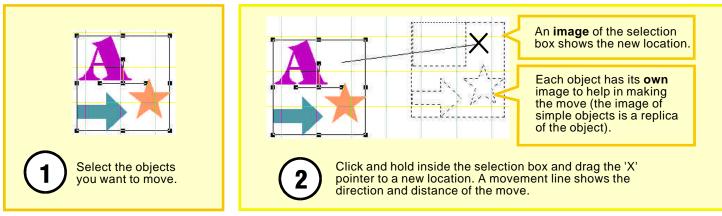
to complete the move.



DX = horizontal shift; DY = vertical shift and DL = the length of the movement line. Angle=angle of move (0=directly to the left)

Move DX:-38.51 DY:30.54 DL:49.15 Angle:141.58								
Object size : Horizontal	250.35	Vertical	116.85	📥 Keep proportional				

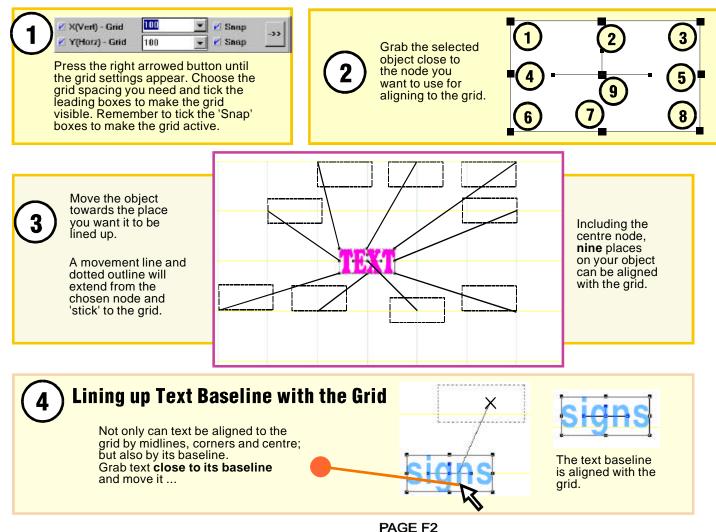
### **Moving a Number of Objects**



#### PAGE F1

### Moving Using The Grid Lining Up

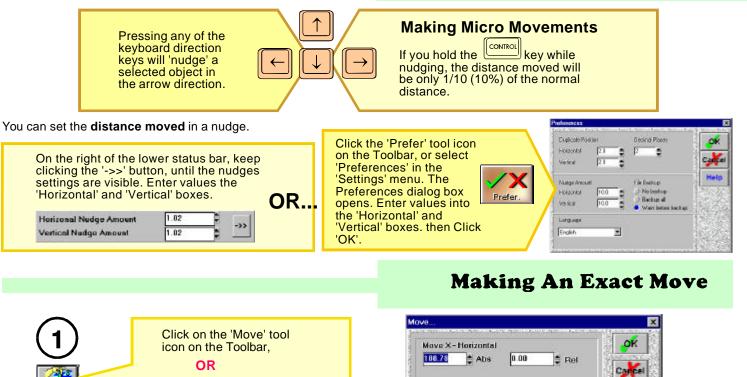
You have the flexibility to line up any corner, side centre, or the object's own centre, with both guide lines and the Work Space grid. To align with the Work Space grid:



2

3

### Nudging Making Small Movements



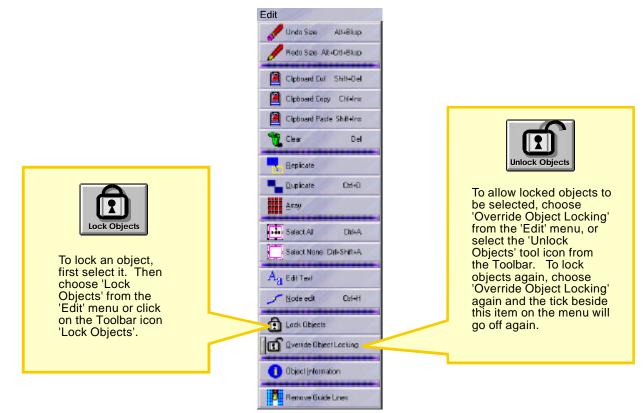
Select 'Move' from the 'Manipulate' menu. The Move dialog box opens. Enter values into the 'Horizontal' and 'Vertical' entry boxes (use either **Abs** or **Rel** boxes). Click 'OK'. 'Absolute Values' are those you can read from the rulers.

PAGE F3

'Relative Values' are measured from the present position of the object.

### Moving Objects Locking & Unlocking Objects

The **advantage** of locking an object is that you can't select or move a locked object. This allows you to finalise the position of one or more objects, and then lock them in position. You may also want to lock a scanned bitmap and use it as a template for building a sign over the top of it. Any further editing you do will not change the position of these locked objects.



Locking also makes it easier to select small objects. When you select a number of objects by dragging a selection box over a part of your work, many large objects also will be selected. If you want to select **only** the small objects around the large ones, simply **lock** the large objects, and then click and drag the mouse over the selected area again.

### Moving Objects Cutting & Pasting

Objects can be moved between '.SBD' files by using the Windows Clipboard.

To cut an object to the clipboard, select the object and choose 'Clipboard Cut' from the 'Edit' menu or press "Shift" + "Del" together or press 'Cntl' + 'X'.

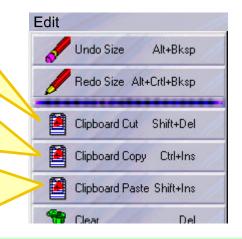
The object is removed from the screen but a copy of it is placed on the clipboard

To copy an object to the clipboard, select the object and choose 'Clipboard Copy' from the 'Edit' menu or press "Ctrl" + "Ins" together or press 'Cntl' + 'C'.

The object remains on the screen and a copy of it is also placed on the clipboard

To paste an object from the clipboard, select 'Clipboard Paste' from the 'Edit' menu or press the "Shift" + "Ins" keys together or press 'Cntl' + 'V'.

Both 'cut' and 'copied' objects can be pasted back onto the screen - either the same screen they came from or into another file.



### **Cutting & Pasting Text**

Text can be brought directly into the program from other Windows applications using copy and paste.

Select the text you wish to bring into this program from a writing program such as MS Word:

#### The Quick Brown Fox

Select that program's method of 'Clipboard Copy' - usually found in the "Edit" menu and copy the selected text to the Clipboard. 2

Select 'Clipboard Paste' from the 'Edit' menu, and your text will be placed onto the Work Space as **editable text** in the **original font and size** but in the current palette color.

#### The Quick Brown Fox

You can now apply any of the text editing features to your text.



If you open the Text Editor before selecting 'Paste' from the Clipboard, imported text will be placed at the cursor in the font, size and other attributes currently selected in the Text Dialog box.

#### PAGE F5

### Moving Objects Copying to Other Applications

The Windows clipboard can be used as a quick method of transferring a graphic image from the program to other applications.



Select the objects you want to copy. You can select any combination of text, vector or bitmap objects.



Choose 'Clipboard Cut' or 'Clipboard Copy' from the 'Edit' menu.



Open the application you wish to copy to. Select that program's 'Clipboard Paste' command often found in an 'Edit' or equivalent menu.



The graphic objects including text, will be placed onto the screen of the target application as a single bitmap at 72dpi for Windows applications but at set sizes for other applications. When copying to Word for Windows, it is recommended that you first create a 'Text Box' on the Word screen (using the 'Insert' menu). With the cursor inside the Text Box, select 'Clipboard Paste'. The graphic will be placed inside the Text Box which can then be moved anywhere on the screen without causing text to flow around it. The Text Box outline can be made transparent by selecting 'No Line' as an

option for the Text Box.

### **Copying from Other Applications**

Some objects can be brought directly into the program from other applications using **Clipboard copy** and **paste**.



You can copy vector objects from Adobe Illustrator using Clipboard Copy and Paste

You can copy objects formatted as "\*.cmx"

directly from the CorelDRAW screen using

Clipboard Copy and Paste.

with colors and layers preserved. Stroke weights will convert with

correct cuttable outlines automatically.

Vector objects with flat color fills will copy

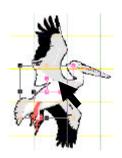
 Once pasted onto the Work Space, you should drag the graphic to a new location and check for any additional wireframe outline and delete it.

Object outlines will automatically be converted to cuttable objects with the correct thickness.

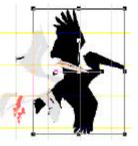
#### PAGE F6

### **Making Groups Keeping Objects Together**

Objects which you have imported or drawn yourself may be composed of many separate objects - each one individually selectable.



It would be easy (and annoving) to find that vou had selected only a few objects when you wanted to move, scale or change many objects.



To keep all the objects which make up a section of your work together ...

Make certain you have selected all the objects you want to keep together.





Click the Group' tool icon on the Toolbar or select 'Group' from the 'Arrange' menu.



Clicking on any object will now select the whole group.

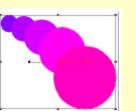


You can include groups in larger groups. Each group of objects remains as a separate group even when inluded in a larger group. The information window lists the total number of both groups and objects selected. Three groups included in another group will be seen as '4 groups'

58 Objects Selected in 4 Groups

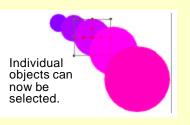
### Ungrouping

Once grouped, you can no longer alter individual objects. If you need to select an object in the group, you first need to ungroup it.



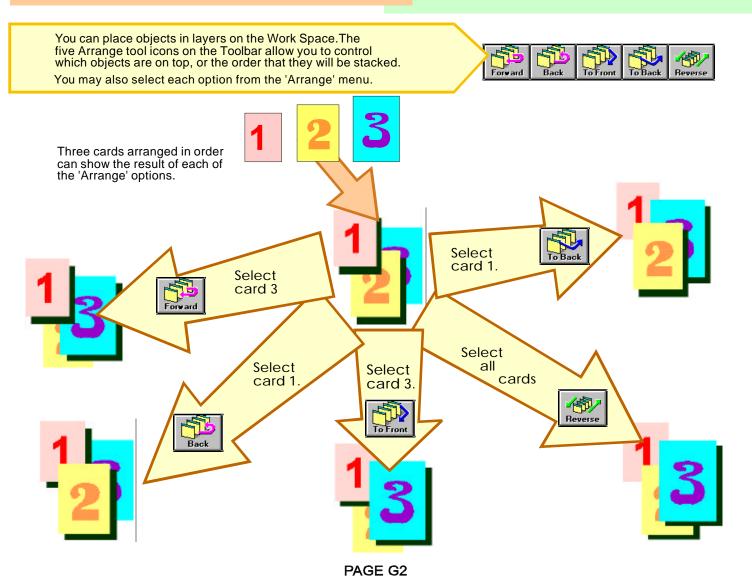
Simply click on the 'Ungroup' tool icon on Ungroup the Toolbar or 'Ungroup' from the 'Arrange' menu.

> *If the group you want is* included in a larger group you must first ungroup the larger group.



PAGE G1

#### **Assigning Objects to Layers**



### Learning Guide Schedule

# HOUR 2

#### **Editing Objects**

- Changing Size:
- H1 Taller or Shorter
- H1 Wider or Narrower
- H2 Larger or Smaller
- H2 Exact Size Changes
- H3 Changing Slope or Skewing
- H3 Making an Exact Skew
- H4 Mirror Options
- H5 Exact Rotations
- H6 Using 'Stretch'
- H7 Combining & Splitting Objects
- H8 Using the Chop tool
- H9 Using the Smooth Corners tool

### The Multi-Function T-Bar™

- I1 Description
- I1 Rotation
- I2 Right Angle Rotations
- 12 Horizontal Mirror Image
- I3 Rotating Around a New Centre
- 13 Changing Size from the Centre
- I4 Skewing With Constant Width
- I4 Unconstrained Skewing
- 15 Right Mouse Button Functions

### **Drawing Basic Shapes**

- J1 Rectangles and Squares
- J1 Exact Rectangles
- J2 Selecting Rectangle Corner Styles
- J3 Circles:
- J3 Exact Circles
- J4 Circle Drawing Modes
- J5 Ellipses
- J6 Hollow Circles and Ellipses
- J7 The Polyline Toolbox
- J8 Drawing Polygons and Stars
- J9 Drawing Arrows
- J10 Adding Dimensions
- J11 Drawing a Grid
- J12 Drawing Registration Marks

### **Copying Objects**

- K1 Duplicating Objects
- K1 Replicating Objects

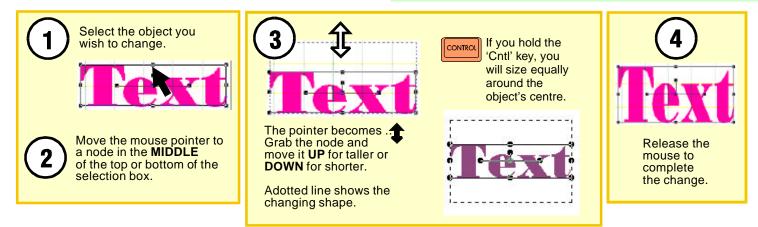
### **Using Color Options**

- L1 Choosing ColorWhiz<sup>™</sup> Palettes
- L1 Changing an Object's Color
- L2 Creating Custom Colors
- L3 Using the Docking Toolbar
- L4 Saving Favourite Colors

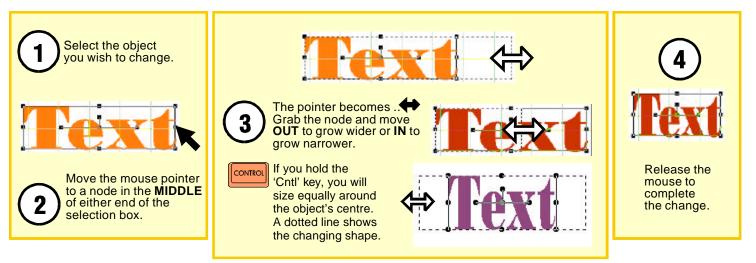
### **Correcting Mistakes**

- M1 Using 'Undo' and 'Redo'
- M1 Using Screen Redraw Deleting Objects (see E3)

### Changing Size Taller or Shorter

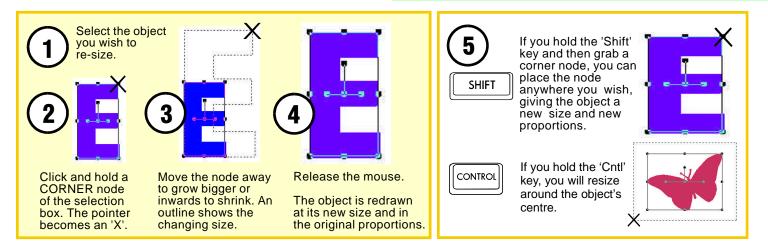


#### **Wider or Narrower**

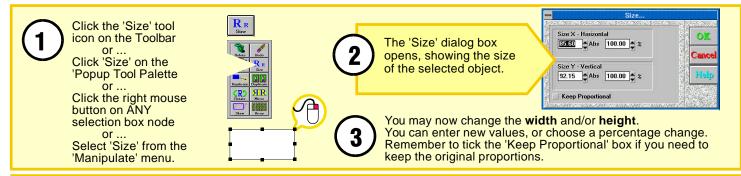


PAGE H1

### Changing Size Larger or Smaller



### **Making an Exact Size Change**



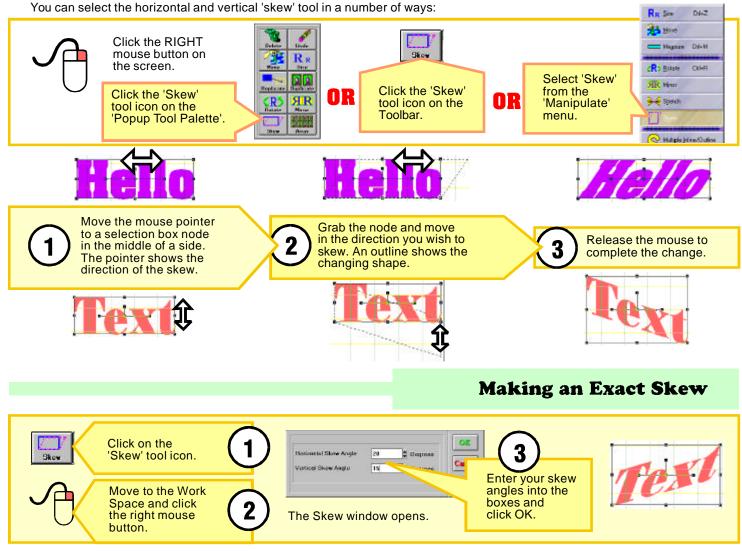
You can also change both height and width of any selected object directly from the lower status window. Click the up/down arrows to change by 5mm a time or enter exact values into the entry boxes.

Tick 'Keep Proportional' to retain your object's original proportions

OR

1 Objects Selected - Polyline									
Object size : Horizontal	250.35	 ●Vertical	116.85	Seep proportional					

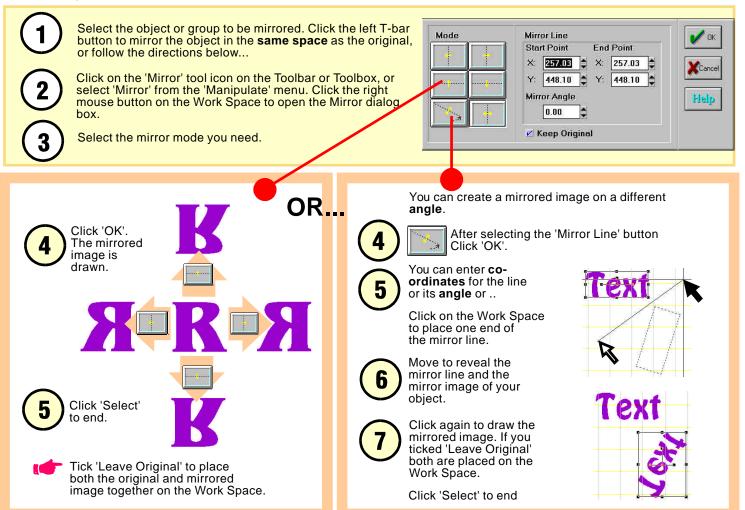
# Learning Guide Skewing Changing the Slope





### **Using Mirror Options**

You may need to create a forward, or 'sunrise' shadow effect requiring a vertical mirror. This program offers a number of mirror options ...

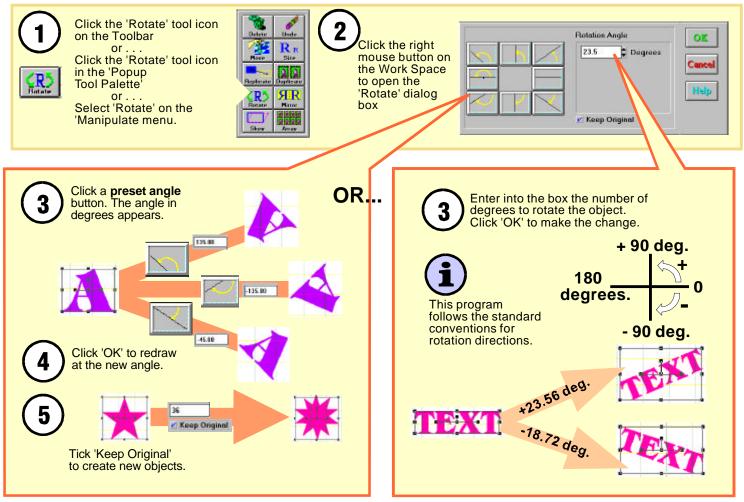


PAGE H4

#### **Exact Rotations**

Although you can rotate any object very easily using the T-Bar, there will be times when you need to make a very accurate rotation - perhaps just 1.5 degrees - to exactly align a vectorised image.

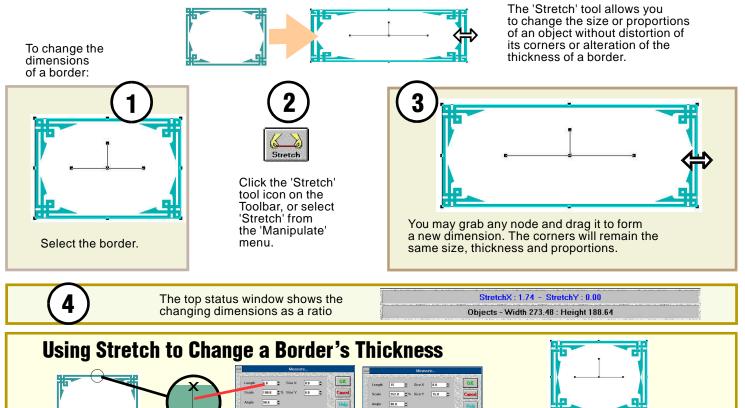
This program allows you precise angle changes exact to 2 decimal places.



PAGE H5

#### **Using Stretch**

If you need to alter the length of a border, dragging the width of its selection box would cause distortion of its corners.

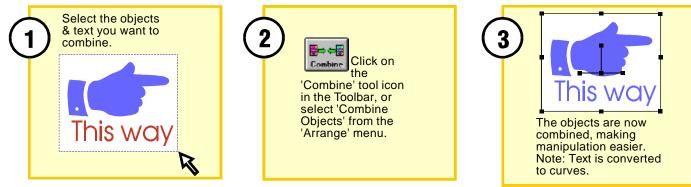


Select the 'Measure' tool and measure the border thickness. Enter the desired thickness into the 'Length' entry box, and click 'OK'. The border will be redrawn with the new thickness but at a new size. Use the 'Stretch' toolon a corner node to restore the original dimensions. The corners will remain undistorted but will show the changed thickness.

#### PAGE H6

#### **Combining Objects**

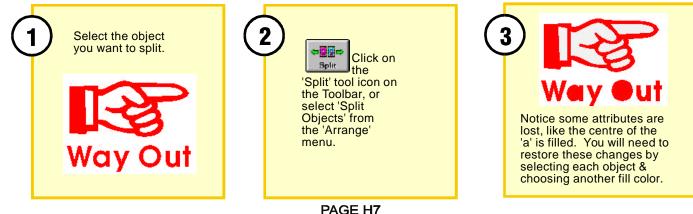
When you combine two (vector) objects, all selected lines and curves are made into a single object with one color. This can be useful for editing nodes simultaneously in different objects, & also viewing uniform color changes.



Note: You can use 'Combine Objects' to mask a bitmap object with a vector object. See 'Masking Bimap Objects'.

#### **Splitting Objects**

You may want to separate objects that you have combined or imported to give each object different outlines or fills. This is not the best way to undo a combine command, as various attributes maybe lost. If you have combined by accident, select 'Undo' from the 'Edit' menu.





The chop tool **splits** an object in two. This allows you to create stunning effects using **different colors**.

To perform a chop, choose the object you wish to chop, and use 'Polyline' to draw a line across the object. The polyline must be open (i.e. must be a line with a start and finish) and must not cross itself. Select the object, hold down the 'Shift' key and select the polyline. Then choose 'Chop' from the 'Arrange' menu, or click on the 'Chop' tool icon on the Toolbar.





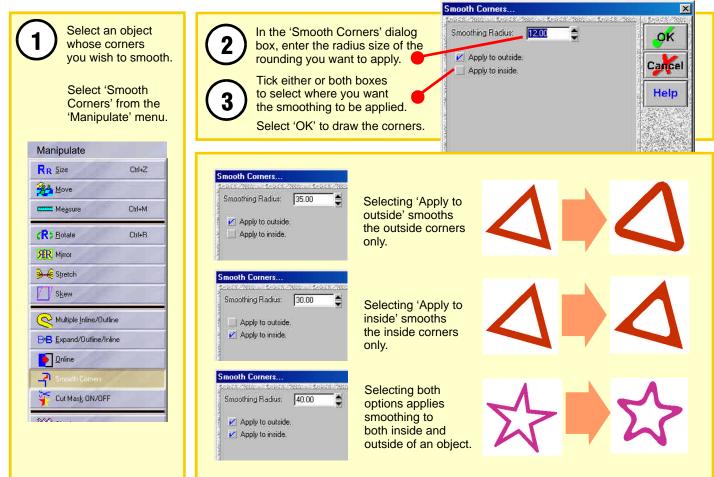
The original object will now be split in two. Viewing the object on 'Outline / WireFrame' will show that there are now two separate objects. It is possible to apply different colors to each side of the border.



#### Editing Objects Using the Smooth Corners Tool

You can apply any degree of smooth rounding to the corners of any vector object ...

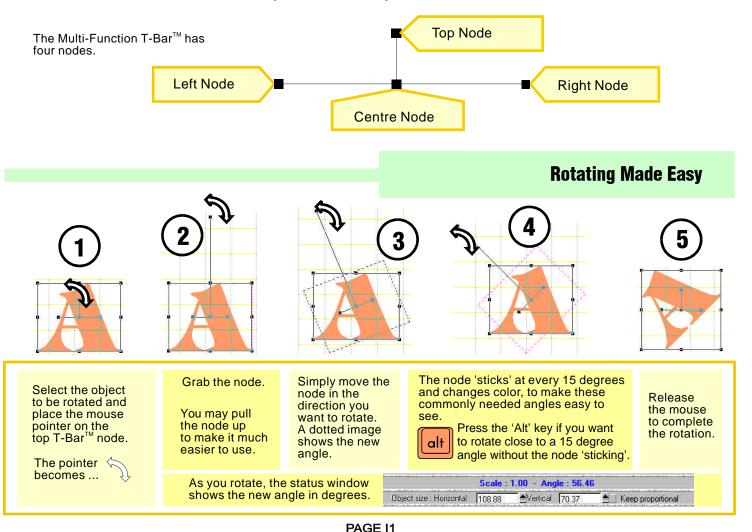
Learning Guide



PAGE H9

#### The Multi-Function T-Bar™

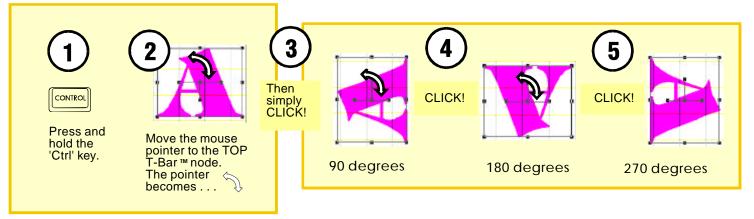
Inside the selection box that surrounds the selected object(s), you will see the 'Multi-Function T-Bar'™, a tool that can make much routine work easy. With this one tool you can Rotate, Mirror, Skew and Size.



#### The Multi-Function T-Bar™

### **Rotating at Right Angles**

Rotating by 90, 180 or 270 degrees is probably the most commonly needed of all rotations. This program makes right angle rotating very easy ...



#### **Making a Mirror Image**

Sometimes a sign or notice must be put on the inside of a glass door or window. For it to read correctly you need to cut a 'horizontal mirror image'...





Move the mouse pointer to the **left T-Ba**r<sup>™</sup> node. The pointer becomes...



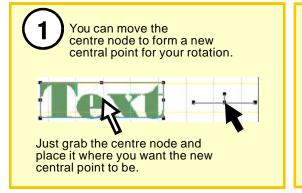
Click the mouse. The object is changed into its mirror image.

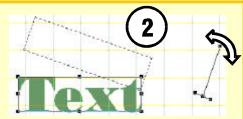
PAGE I2

#### The Multi-Function T-Bar<sup>™</sup>

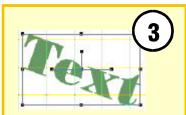
There are two more functions that you can use on the T-Bar<sup>™</sup>.

### Ching the Centre of Rotition





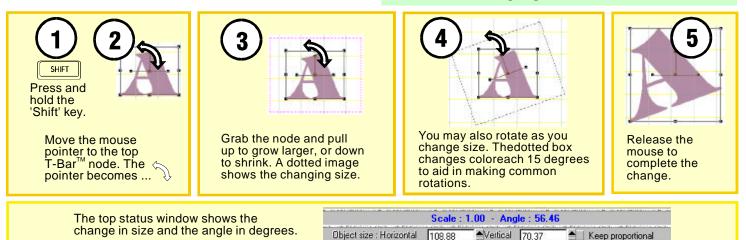
Grab the top node - pull it up to make it easier to use - and rotate the object in the direction you need.



Release the mouse to complete the rotation.

#### Ch nging Size from the Centre

Keep proportional



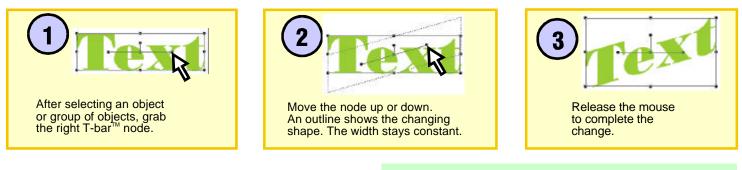
Object size : Horizontal 108.88

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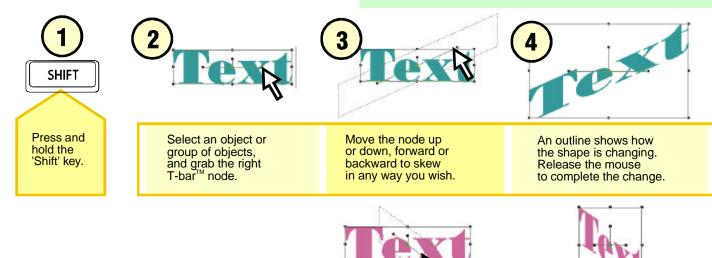
#### The Multi-Function T-Bar™

#### **Skewing with Constant Width**

The **right** T-Bar<sup>™</sup> node allows you to change the **length**, **angle** and **slope** of an object.

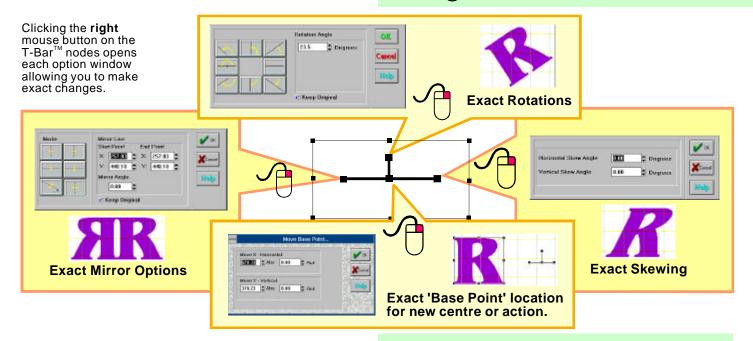


#### **Unconstrained Skewing**

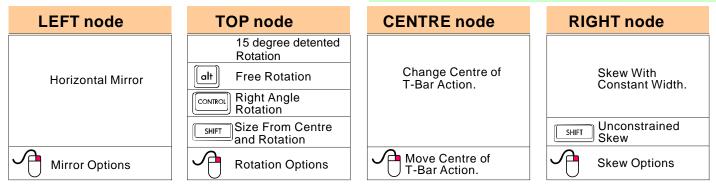


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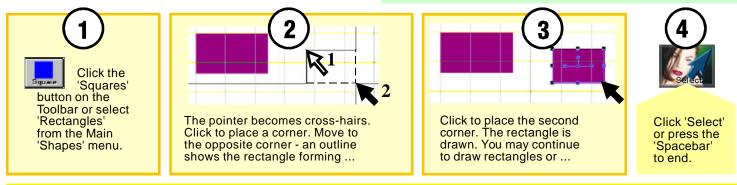
#### The T-Bar<sup>™</sup> and the Right Mouse Button



#### Summary of T-Bar<sup>™</sup> Options



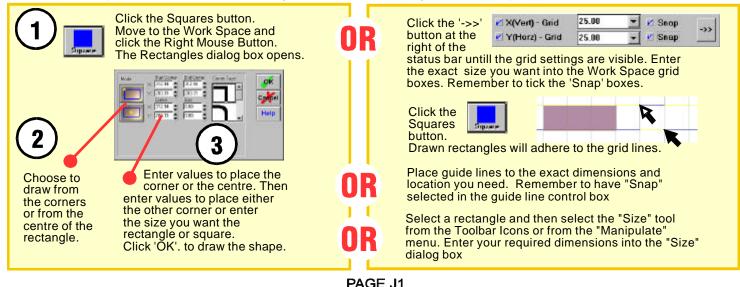
#### **Drawing Basic Shapes** Rectangles and Squares



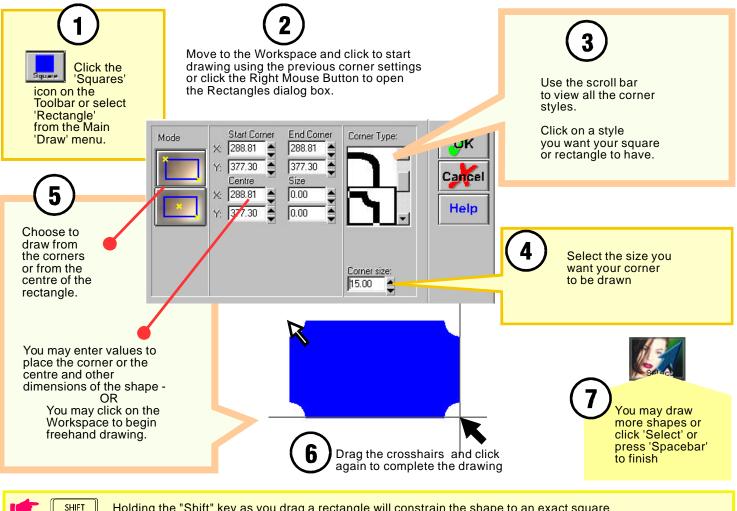
SHIFT Holding the "Shift" key as you drag a rectangle will constrain the shape to an exact square

#### **Making Exact Rectangles or Squares**

Sometimes you need the draw exact rectangles or squares. This program offers many ways to do this ...



#### **Drawing Basic Shapes Choosing Rectangle Corners**



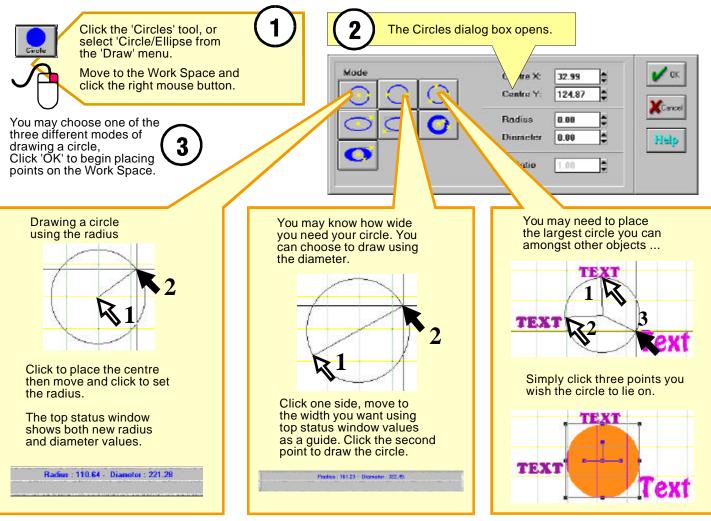
Holding the "Shift" key as you drag a rectangle will constrain the shape to an exact square

Use the "Stretch" tool to change the height or width without distortion of the corners

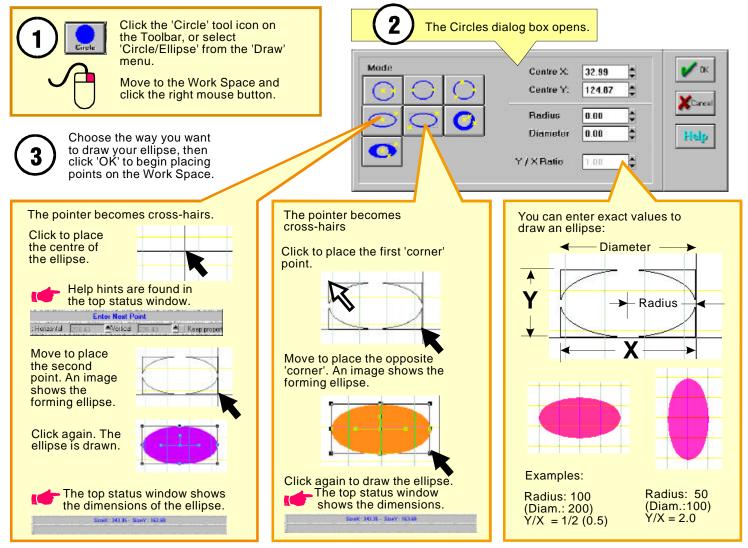
#### **Drawing Basic Shapes** Learning Guide Circles Click 'Select' or press the 'Spacebar' Click the 'Circle' tool icon to end making on the Toolbar, or select 'Circle/Ellipse' from the circles. 'Draw' menu. A circle forms in the current palette The pointer becomes cross-hairs. Click to place the color. You can continue clicking to circle centre. Move the mouse ... a radius line forms make more circles or . . . with a size outline. Click again to set your circle size. You often need to be place circles at exact positions, or draw them to an exact size. In this program you can: Click the 'Circle' tool icon in the Click the '->>' button until OR 25.00 Toolbox. Move to the Work Space the grid settings are X/Vert) - Grid Snep and click the right mouse button. visible. You can set your Y(Horz) - Grid 25.00 Snap The Circles dialog box opens. radius size in the Hor. (or Vert.) grid values. Click to place Remember to tick the the centre and 'Snap' boxes to make the then the radius Mode Centre X: 32.99 points 'stick' to the grid. Centre Y: 124.87 Cares 0.00 Redius 0.00 Dismeter. Help Y/XRatio Click 'Select' or press the Enter X and Y values to locate 'Spacebar' the centre. You can choose to end making to enter either the radius or circles. diameter length. Click on 'OK'. Click 'Select' to finish.

### **Drawing Basic Shapes** More Ways to Draw Circles

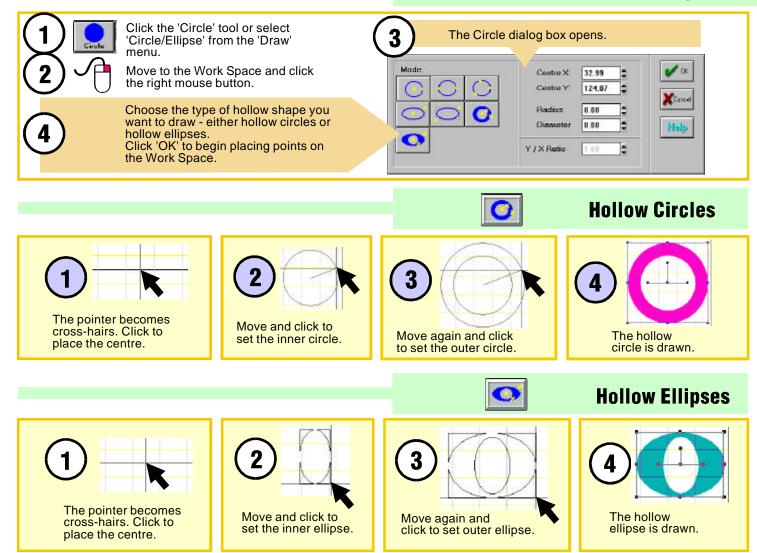
You can be draw circles in a number of different ways. You can choose the best way to suit a particular need.



#### Drawing Basic Shapes Elipses



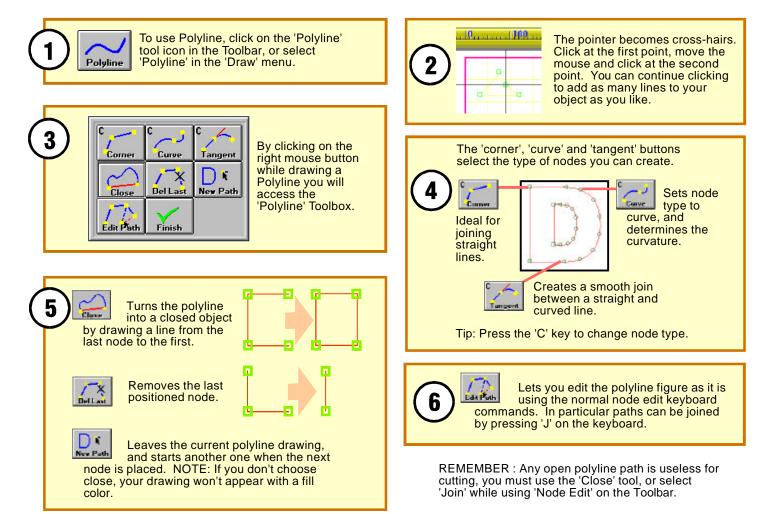
#### Drawing Basic Shapes Hollow Shapes



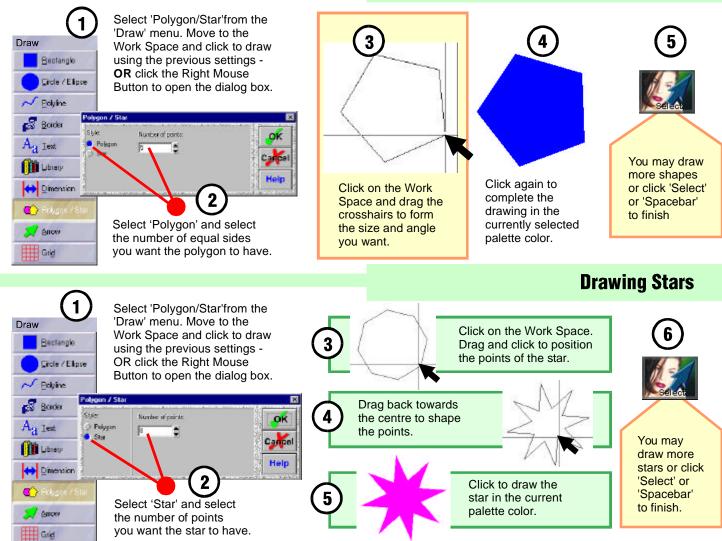


### Drawing Polylines The PolylineToolbox

Polyline lets you draw freehand an object composed of lines and curves. Polyline figures are made by drawing lines point by point, and then connecting them up to form objects

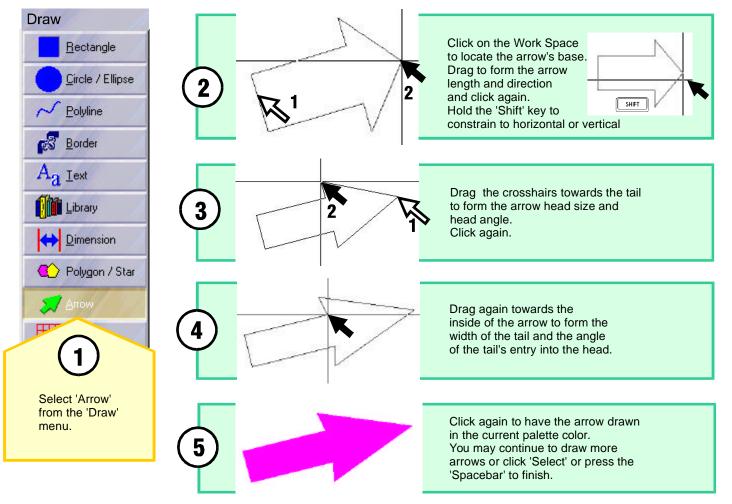


#### Drawing Basic Shapes Drawing Polgons



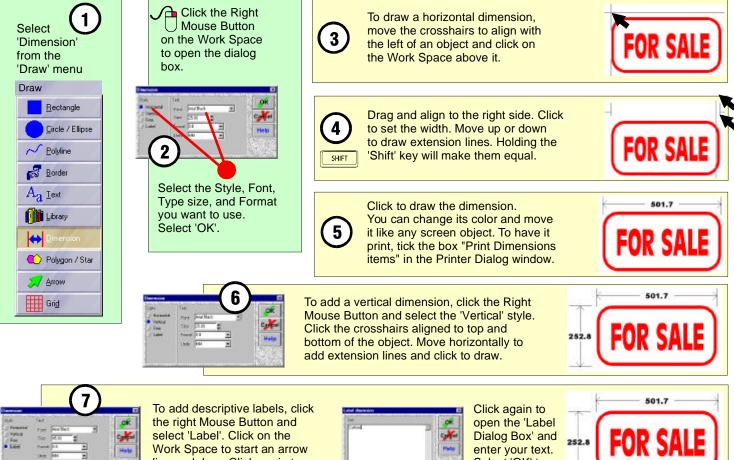
#### Drawing Basic Shapes Drawing Arrows

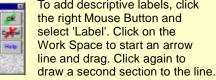
Although there are many arrow shapes to be found in the Program's Library you can draw an arrow to your own specifications in a few simple steps.



#### **Drawing Basic Shapes Drawing Dimensions**

Including dimensions with your work provides customers with useful information and a professional appearance.





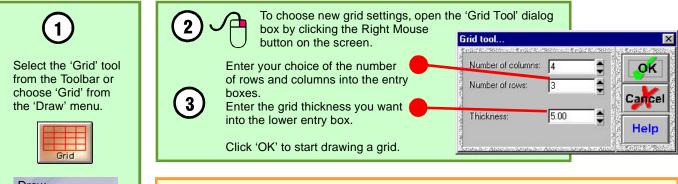


Select 'OK' to draw the label.



#### Drawing Basic Shapes Using the Grid Tool

Graphical presentation of a number of items might include arranged 'boxes' or a 'grid'. Drawing a grid of any size or proportions and any number of boxes is easy using the 'Grid' tool.





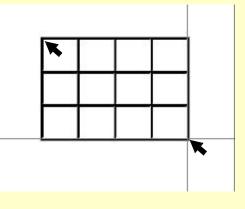
Click on the screen to place the top left corner of the grid.

Drag the 'cross-hair' pointer to place the bottom right hand corner and click again.

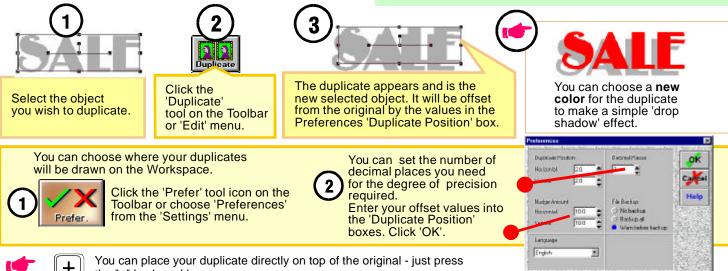
You can draw another grid or click the right mouse button on the screen to reopen the dialog box and change your selections.



Click 'Select' to finish drawing grids.



#### **Duplicating** Making a Single Copy

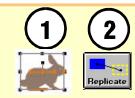


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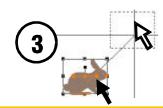
the "+" keyboard key

### **Replicating** Making Many Copies

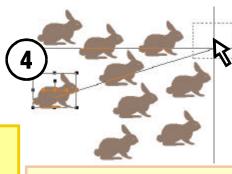
Making many copies would be tedious if each had to made as a duplicate and then moved. This program makes multiple copies easy ...



Select the object to be copied and click the 'Replicate' tool icon on the Toolbar or select 'Replicate' from the 'Edit' menu.



The pointer becomes cross-hairs Click on the selected object then move to place the first copy. An image and movement line shows the move.. Just click ...



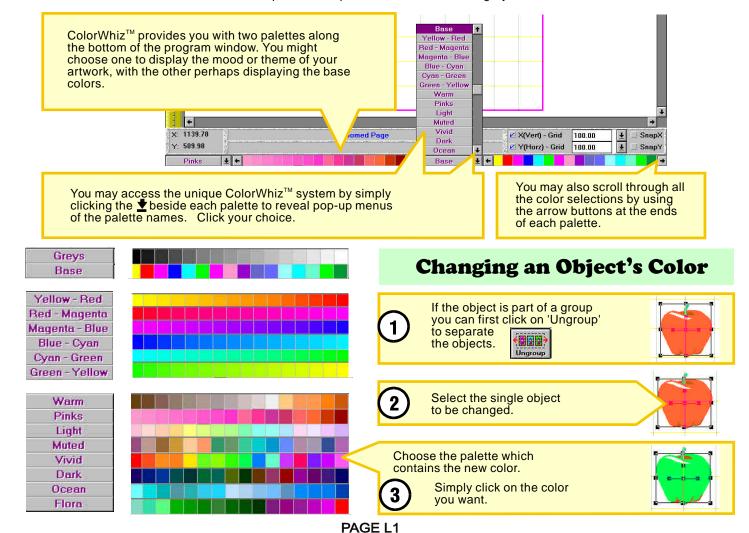
Continue to move and click to draw all your copies ...



Click 'Select' or press the 'Spacebar' to stop replicating.

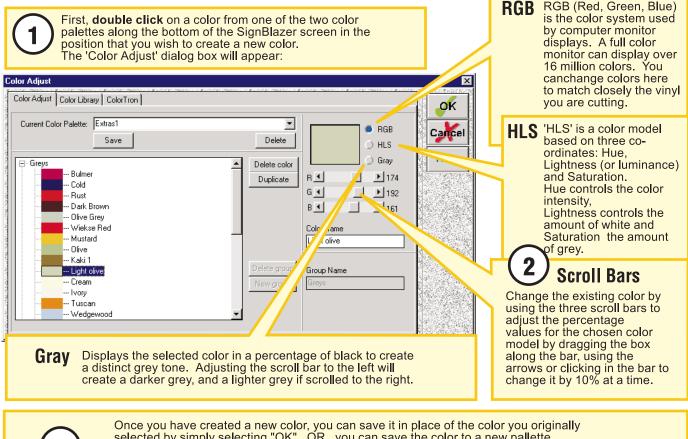
#### Using ColorWhiz<sup>™</sup>

ColorWhiz<sup>™</sup> is: a unique system which organises color into palettes relating to moods, tones and themes as well as the complete color spectrum, base colors and grey tones.



#### Using Color Whiz Creating Custom Colors

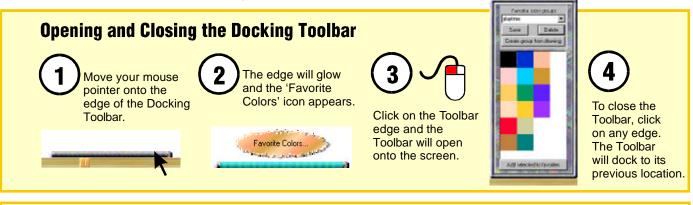
It is easy to create a color of your own using 'Color Adjust'. You can change the percentage values of color components using either the 'RGB', 'HLS' or 'Gray' systems of color description.



selected by simply selecting "OK" OR you can save the color to a new pallette. To create a new pallette for your new color, simply enter a name into the "Color Pallette Setup" text box and select "Save". Selected Color pallettes can also be removed by using the "Delete" button

#### Saving Favorite Colors The Docking Toolbar

The 'Favorite Colors' tool is available to capture and store colors, color gradients and textures used in your drawings. It is quickly and easily accessed from the 'Docking Toolbar'.

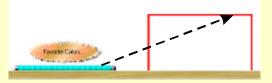


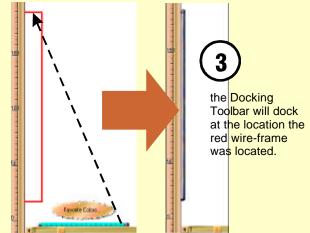
Reloc ting the Docking Toolb r You can locate the Docking Toolbar anywhere along the bottom edge, sides or even the top edge of the screen work area.



Click the left mouse button on the Docking Toolbar and hold the button ...

Drag the mouse... A red wire-frame of the Toolbar forms. Drag the frame to where you want to relocate the Toolbar and release the mouse.





#### Saving Favorite Colors Creating and Using Groups

The 'Favorite Colors' tool is available to capture and store colors, color gradients and textures used in your drawings. It is quickly and easily accessed from the 'Docking Toolbar'.

#### **Creating, Saving and Deleting Groups**



With a vector graphic on the screen, open the Docking Toolbar.

Click 'Create Group from Drawing'. All the solid colors, color gradients and texture fills in the drawing will be saved into a group.



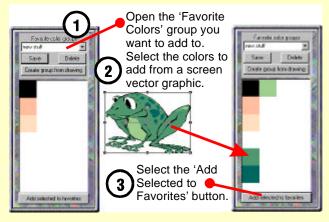
The group will be named from the name of the **file you have open**. You can save the group by another name if you want to. Enter a name into the entry box. Click on 'Save'.

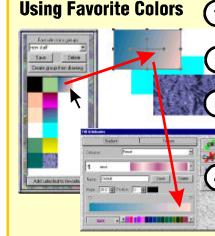
Click on 'Delete' to remove a group you no longer need.

To remove a color click Right Mouse button on it and click the 'Delete' option.



#### Adding Colors to a Group





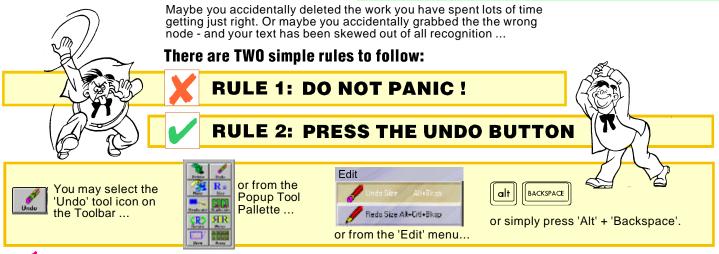
Choose a 'Favorite Colors' group from the Group list.

Select a vector object on the screen.

Click on a solid color, gradient or texture from the group window to fill the object.

Selected gradient fills can also be opened in 'Fill Attributes' and edited or saved.

# **OOPS!** Using 'Undo' and 'Redo'



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ro You may continue to press 'Undo' to move backwards through the work you have done.

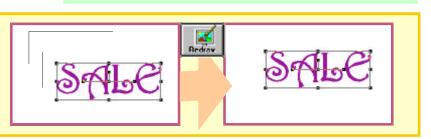
You can also "undo" an 'Undo' operation. This is called 'Redo'. The 'Redo' function allows you to move forward through a history of 'Undo' operations - or you may want to simply review "before" and "after" views of your work. To perform a 'Redo' you can press 'Cntrl' + 'Alt' + 'BkSpc' or click the 'Redo' tool on the Toolbar or select 'Redo' from the 'Edit' menu.



#### **Using Screen Redraw**

Some video controllers occasionally leave line fragments or other parts of a drawing incorrectly on the screen ...

You can click 'Redraw' or press Function Key F3 to remove any unwanted 'mistakes' ...

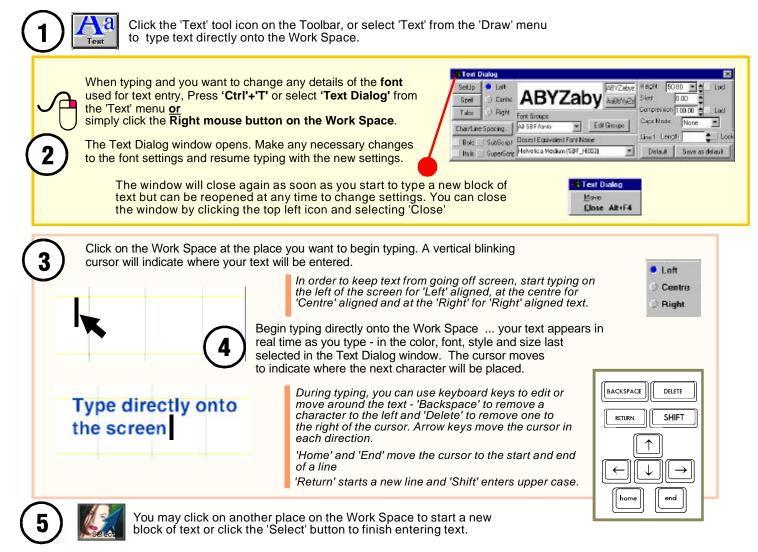


### Learning Guide Schedule

#### **Typing and Editing Text**

- N1 Typing Text in the Work Space Selecting Text Attributes:
- N2 Font
- N2 Text Height
- N2 Compression
- N2 Slant
- N3 Justification
- N3 Superscripts & Subscripts
- N3 Case Mode
- N3 Bold and Italic Fonts
- N3 Using 'Setup' to Store Selections
- N4 Spell Checking Setting:
- N4 Character Spacing
- N5 Line Spacing
- N5 Line Length
- N6 Tabs
- N7 Changing Blocks of Text
- N8 Moving Individual Characters
- **N9** Changing Character Attributes
- N10 Creating/Editing Font Groups
- N11 Saving Kerning Pairs
- N11 Splitting Text Lines
- N12 Placing Text on an Arc -1
- N13 Placing Text on an Arc -
- N14 Typing Extended Characters

# HOUR 3



PAGE N1

### **Entering Text** Choosing Fonts and Attributes - 1

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Selle as delauk

Lock



If you want to enter text in a different font, character height or other attributes to those currently selected, you will need to make changes in the Text Dialog window.



Press 'Ctrl'+'T' or select 'Text Dialog' from the 'Text' menu or select the 'Text' tool on the Toolbar or 'Text' from the 'Draw'

menu and click the right mouse button on the Work Space.

For Groups

Grouts

I SBF tonts

SignBlazer

**Closest Equivalent Font Name** 

Goudy Display (SBF\_0032)

Goudy Italic (SBF\_G028)

Goudy Display (SBF\_G032)

Goudy Diveley XBold (SBF G033)

oudy Gathic Norm (SBF\_G857) oudy Handtooled (SBF\_G835)

Greek Sans (30F\_G030) Treek Sans Bold (S0F\_G055)

othic Black (SBF\_G037)

Goudy Old Style Bold Date (SBF\_G045) Goudy Old Style Norn (SBF\_G045) Goudy Old Style Norn Rate (SBF\_G047)

Grasby Round Condensed (SBF\_G041) Graphic shadow (SBF\_G040)

Gothic Bold (SBF\_G036)

Text Dialog

Char/Line Spacing.

Lell

Centre :

Right

SubSc

Supriscip

SetUp

Spel

Tabs.

Bold

Italia |



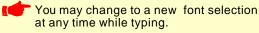
Click the list arrow box.

A drop-down listing appears.Use the scroll bar or arrow buttons to scroll through the font list.

A sample of the highlighted font is shown in the top window. You can choose the Alphabet, or type your own sample in the entry box.

You can also use the Up, Down, Page Up and Page Down keys to move the highlight to different fonts.

Click a font name to select it or press the 'Default' button to choose the font stored as default. You can choose any font and save it as your default font along with a height, compression etc. by pressing the'Save as Default' button.



Selecting text you typed before shows the font you used in the status window.

5

### **Changing Compression**

SignBlaze

AnBbYyZz

Edit Groups

Height.

Caps Mode

Defa.

Line1 Length

Compression 10,000

Slant

Changing Compression squashes or stretches your text. 100% is normal text with no compression.



Enter a value into the 'Compression'box and press 'Enter'.

### 3 Choosing Text Height

The height of your text is measured by the height of the capital 'X' of the selected font.

You may enter a height value into the entry box and press 'Enter' or ...

Click the up and down arrows to change the current value by 5mm at a time or ...

Click the large list arrow. A drop-down listing of your last 10 height selections appears. Simply click the height you want.



 You may change to a new text height at any time while typing onto the Work Space.

# 4 Choosing a Slant

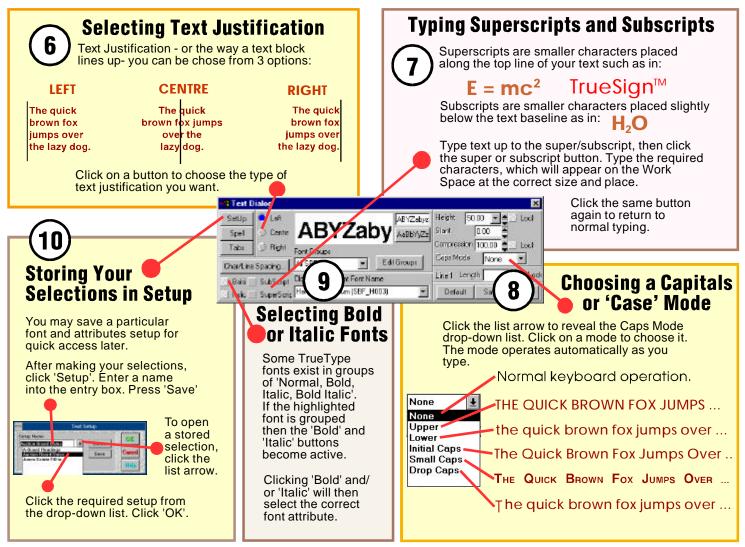
You may type *oblique* text by changing the Slant angle. A new angle may be entered at any time during typing.

#### Text on a slant gives emphasis.

Enter the degrees of slant required into the 'Slant' box and press 'Enter'. 12 deg. is commonly used for 'italic' text.

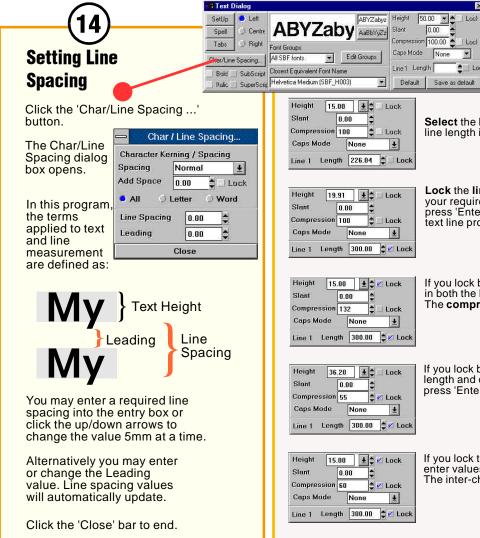
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#### **Entering Text** Choosing Fonts and Attributes - 2



#### **Entering Text** Learning Guide **Choosing Fonts and Attributes - 3** 12) **Using the Spell Checker** 13 **Setting Character Spacing** The qwick brown fox jumps Click the mouse on the block of text to be You can choose either a over the lazy dog Char / Line Spacing. spell checked. Click quick character spacing Character Kerning / Spacing the 'Spell' button. mode, or accurate Spacing Normal manual spacing control. Add Space 0.00 Inch Words which are not Click on the 'Char/Line All Letter Wand found in this program's spacing ...' bar to open Dictionary will change Line Specing 0.00 the dialog window. color. A list of possible Loading 0.00 ÷. corrections will appear in the Spell Check Click the list arrow to reveal a Cinza 'Alternates' window and the most likely of drop-down list of convenient these appears in the 'Replace with' box. + spacing modes. Select a mode. Normal Normal Wide R Text Dialog If the correction you want is Close not displayed in the 'Replace SetUp Left ABYZabyz Height 50.00 Lock Touching ABYZaby ABBYYZZ Overlap with' box, scroll through the Slant 0.00 Spell 🔿 Cent 'Alternatives' list. Click the Compression 100.00 Lock Hight Tabs Font Groups correction you want. **Normal Spacing** Caps Mode None -Edit Groups All SBF fonts Char/Line Spacing. Wide Spacing 📥 Lock Line1 Length Closest Equivalent Font Name Bold SubScript **Close Spacing** SuperScrip Helvetica Medium (SBF\_H003) -Default Save as default Click Replace to Italic Letters Touching Replace correct the word. LETTERSOMETLAPPING Click Replace All to automatically Replace All More precise spacing correct additional occurrences of the adjustment can be made by entering a value same error in the rest of the same text in mm. into the 'Add Space' box. block. Some text may include the date, or 20mm. text numbers, or other non dictionary - Add Space 0mm The Quick Brown Fox Jumps ... characters. Click Skip to ignore a single Skip. - Add Space 5mm The Quick Brown Fox Jumps ... item, or Skip All to ignore repeats in the - Add Space -1mm The Quick Brown Fox Jumps ... same text block. Skip All You may choose to individually change character spacing or the space between Uncommon words can be added to the words. Clicking 'All' adjusts both char. dictionary by clicking Add to dictionary. and word spacing together. - Add 'Word' Space 8mm To spell check text you are **not** OR editing, select 'Spell Checker' The Quick Brown Fox Jumps .... from the 'Text' menu, click the desired option, then press 'OK'. Help Click the 'Close' bar to end char/line spacing.

### **Entering Text Choosing Fonts and Attributes - 4**



# **Setting Line Length**

You may need to set the length of a line of text to exactly fit some feature of your work.

Select the line whose length you need to set. The line length is displayed in the Line Length box.

×

.

Lock

#### Practice makes perfect

Lock the line length by clicking its 'Lock' box. Enter vour required length into the Line Length box and then press 'Enter'. The text Height will change to keep the text line proportional.

#### Practice makes perfect

If you lock both length and height, you may now set values in both the length and height entry boxes, and press 'Enter'. The **compression** will now change to reflect the changes.

#### Practice makes perfect

If you lock both the length and compression, you may enter length and compression values into their entry boxes and press 'Enter'. The text height will now reflect the changes.

# Practice makes perfect

If you lock the length, height and compression, you may enter values into all their entry boxes and press 'Enter'. The inter-character spacing will alter to reflect the changes.

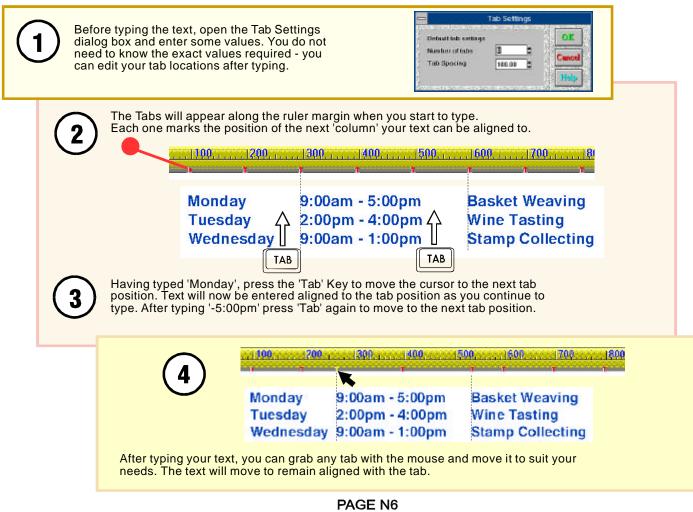
#### Practice makes perfect

#### PAGE N5

#### **Entering Text** Using the Tab Feature

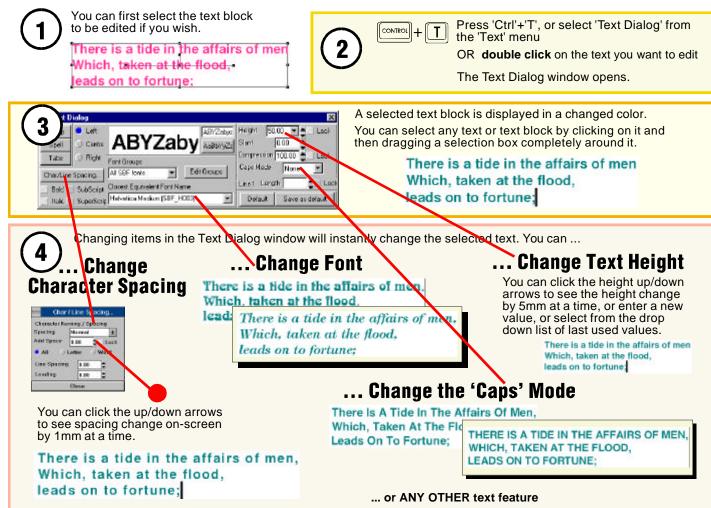
Laying out your work when 'tabular' text is required, is made easy by using the 'Tabs' feature. For instance, you may need to set out opening times and activities in tabular form ...

*ter the Tab feature is only available when your text is "Left Justified"* 

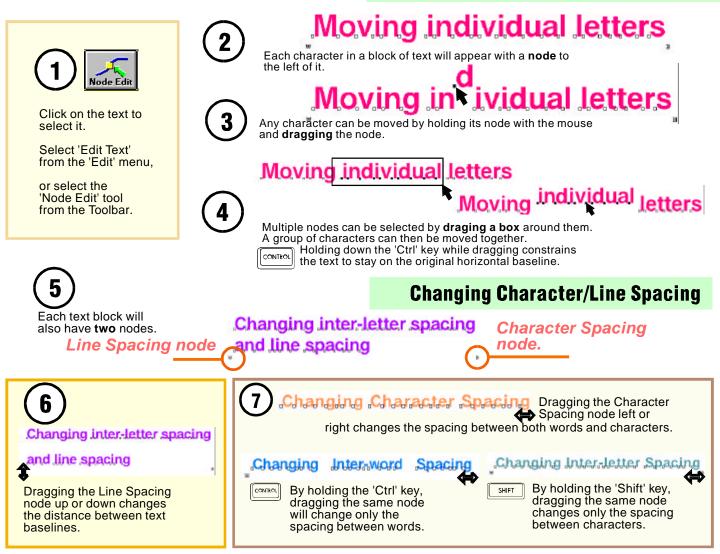


#### Editing Text Changing Blocks of Text

You can change the **font**, **styles** and **attributes** of complete **blocks** of text with the minimum of movements, and see the changes instantly on the Work Space:

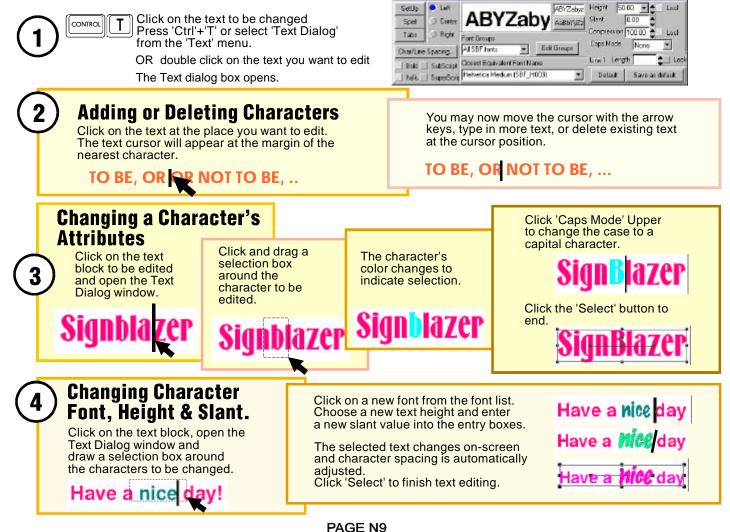


#### **Editing Text** Moving Individual Characters



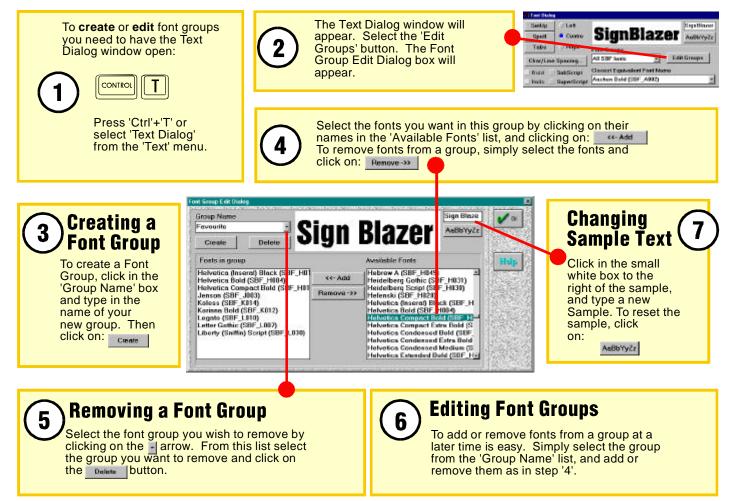
#### Editing Text Changing Characters

You can add, delete or change the font, style or attributes of any **character** or **group** of characters, in any **block** of text.



#### **Entering Text** Creating Font Groups

Font groups are a useful way of managing your fonts. You may group fonts into serif, sans serif, script, making it easy to search for a particular style. Alternatively, you can group them according to their **use**, for example: 'Real Estate', 'Windows', 'Block Headings'.



#### **Typing and Editing Text** Save Kerning Pairs

Kerning is the spacing applied to pairs of letters to make their appearance in words look more even.

For instance: Without kerning, the areas between letters can make words like 'VAULT' look very uneven.



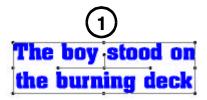
With kerning applied to V,A' 'A,U' and 'L,T' letter pairs, the word appears more even.

# VAULT

You can alter existing kerning pairs and save them for all future use of a particular font.



You can undo kerning changes BEFORE YOU SAVE THEM by selecting the changed text while in 'Text' typing mode and pressing 'Shift' + 'Delete' to cut it to the clipboard. Then, still in 'Text' typing mode, press 'Shift' + 'Ins' to paste it back to the screen without the changed kerning.



Select the text block you wish to split into individual lines.



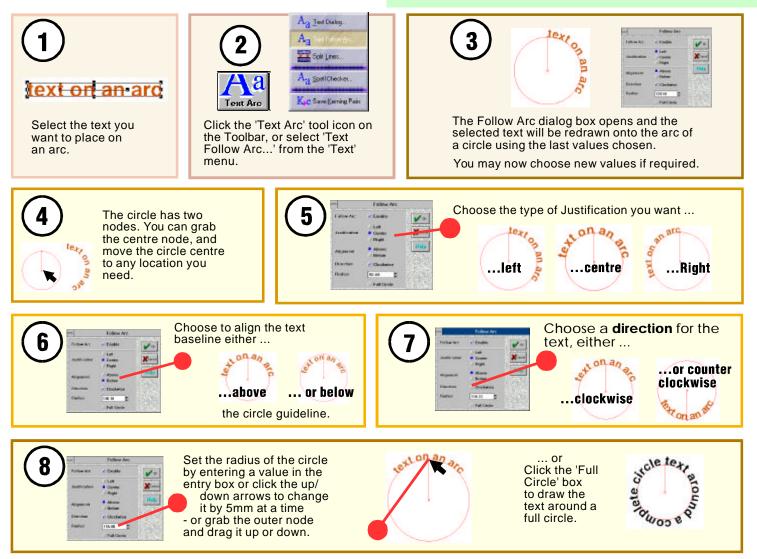
Select 'Split Lines' from the 'Text menu.

#### **Splitting Text Blocks Into Lines**

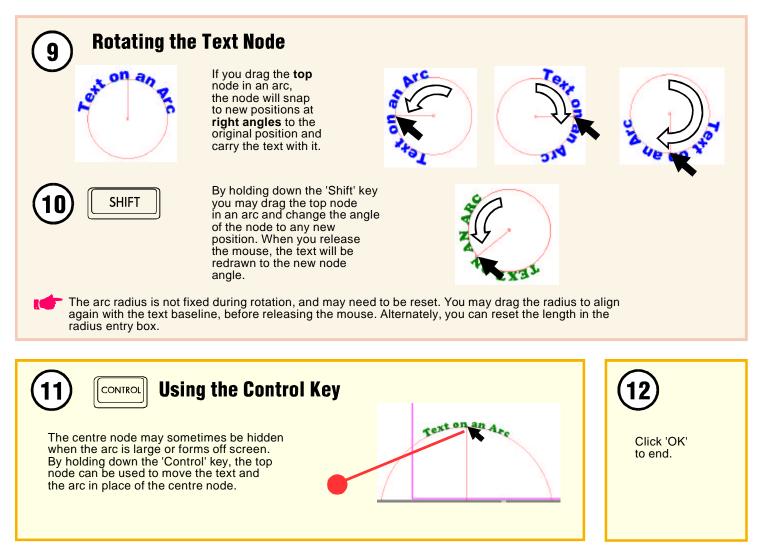


Select individual lines for independant treatment.

#### Placing Text on an Arc - 1



#### Placing Text on an Arc - 2



#### Typing Extended Characters

The Windows operating system can only install a limited number of fonts (usually <1000 depending on font name lengths). All your SignBlazer fonts are available **at all times** and are not 'installed' in the Windows Fonts folder but are loaded in the 'SignBlazer5\sbfonts' folder. There is **no limit** to the number of SignBlazer fonts you can have available to the program. Additional TrueSign<sup>™</sup> font packs can be downloaded from the Blazer web site as they become available.

âlãläla

а



Whenever you open the Text Dialog box, all the characters in the selected font are available for display in the information window.



Use the scroll arrows to view all the available characters including accented characters and symbols. Some fonts also carry different forms for the same letter - these can also be viewed in the same window.

3

Once you have clicked on the Work Space to start typing you can click on any character in the information window and it will be typed directly at the cursor position. Text Dialog × C Left 70.00 ABYZabyz Height Lock SetUp ABYZab Slant 0.00 🔿 Centre Spell Compression 100.00 Lock Tabs. ) Right Font Groups Caps Mode None • Edit Groups All TTF fonts Char/Line Spacing Line 1 Length Lock **Closest Equivalent Font Name** Bold SubScript Arial Medium (SBF\_A062) Default Save as default Italic SuperScrip

Care

æ

You can also use the more complicated Windows keyboard codes for extended characters if you wish.

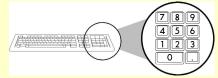
 Additional letter forms included in some fonts cannot be seen using this method.

X: 225.68

Y- 191.57

-

"Try our pâté and specialty ragoût"



In TEXT mode, hold the 'Alt' key down and then type the four digit character code on the **keyboard number pad**.

1 á â ã Α Α à 0192 0224 0193 0225 0194 0226 0195 0227 0196 ë Æ æC è Ε é С 0199 Ó 0239 0209 0242 0238 0207 0241 0210 O œ 0211 0243 0212 0244 0213 0140 0156 0245 0214 0246 0216 Š 0138 0154 0249 0218 0250 0210 0251 0220 0252 0159 0255 тм 0221 0174 0153 0163 а » 0170 0186 0208 0240 0132 0145 0146 0147 0148 0149 0171 0187

XVert1 - Guides

(Horz) - Guid

#### Learning Guide Schedule

#### **Image Controls**

- O1 Scanning Images
- O2 Color Reduction
- O3 Color Invert
- O3 Resample
- O4 Masking Bitmap Objects
- 04 Reverse Masking
- O5 Vectorise
- O6 ImageCut
- 07 Photo Fix
- O8 The Mode Tool
- O9 The Crop Tool
- O10 The Rasterize Tool

#### **Aligning Objects**

P1 Using The 'Align' Tool Aligning to the Grid (see F2) Aligning to Guidelines (see B6) Aligning Nodes (see BB4)

#### **Making Arrays**

- Q1 Rectangular Arrays
- Q1 Making Repeat Object Borders
- Q2 Circular Arrays

#### **Using the Measuring Tool**

- R1 Lengths and Scaling
- R2 Angles and Rotation

#### **Drawing Borders and Panels**

- S1 Basic Borders
- S2 Borders with Ornate Corners
- S3 Basic Panels
- S3 Ornate Panels

#### **Drawing Using the Library**

T1 Using the Graphics Library

#### **Creating Distortions**

- **U1** Vertical Bezier Distortion
- U2 Horizontal Bezier Distortion
- U3 Fit to Arc (Clockwise)
- U4 Fit to Arc (Counter Clockwise)
- U5 Fit to a Globe
- U6 Linear Distortions
- U7 Perspective
- U8 Vertical Arch Distortion
- **U9** Horizontal Arch Distortion
- U10 Fit to Cylinder
- **U11** Flag Distortion
- **U12** Warp Distortion
- U13 Arch 2 Distortion
- **U14** Twirl Distortion
- U15 Vertical Ridge Distortion
- U16 Horizontal Ridge Distortion

#### **Fill Effects**

- W1 Fractalise
- W2 Color Blend
- W3 Color Medley
- W4 Fill Attributes
- W5 Textures
- W6 Drop Shadow
  - 'Hand Tooled' Characters (see V5)
- W7 Special Effects
- W8 Linear Transparency
- W9 Color Transparency

# HOUR 4

#### Image Controls Scanning Images

To place a hand-drawn picture or photo on your work, it will have to be scanned in. Scanners convert images into formats that the computer can manipulate.

If you have upgraded your scanner software, changed scanners or have more than one scanning device attached to your system, you will need to select 'Scan Select Source' from the 'Image' menu. Choose the device you want from the list and click 'OK'.	Image Scan Acguire Scan Select Source	Select Severe Sources: MagicScan V2.2 UMAX MagicScan V1.2 VistaScan V2.11 Select Cancel	X
--	---	---	---



To place an image directly into this program: Click on the 'Scan' tool icon on the Toolbar.

Image
🚅 Scan Acguire
Scan Select Source

or Select 'Scan Aquire' from the 'Image' menu.



A scanner dialog box will appear. Each brand of scanner will have a different looking dialog box. For information on how to use your particular scanner, select 'Help' when the dialog box appears or see its manual. If a 'Scanner Setup' dialog box appears, your scanner configuration has changed, or was not correctly installed. Contact your scanner supplier for technical support.

After following the scanning procedure in the dialog box, the scanned image will appear directly on the screen.

#### Image Controls Color Reduction

Colored Images that you bring into this program are often composed of many colors. In order for these images to be cut, you need to be reduce the number of colors. Four to eight colors are desirable. Note: A white or black background is also a color.



To do a 'Color Reduction', select an image. Then click on the tool icon 'Color Reduction' on the Toolbar, or select 'Color Reduction' from the 'Image' menu.



#### Save

To save a color palette once you have chosen a number of colors, type a new name in the drop down list and press 'Save'.

#### The Color Reduction dialog box pictured below will appear. Select the 'Number of Colors' you want, and select 'OK'. Several extra 'Color Reduction' features are explained below:



#### Delete

Highlight the palette name you want to remove from the list, and press 'Delete'.

#### Auto Palette

Determines colors as close to the original as possible, limited by the number of colors you specify, and then shows a preview. To accept the result select 'OK'. To **cancel** only the **preview** press the 'Image Reset' button. To cancel the **whole** function press cancel.



#### **Color Palette**

To select a color palette, click on the button, and select the one you want to use. To create a new color palette click in the box on the left of the button and type its name, and select the 'save' button.

#### **Image Reset**

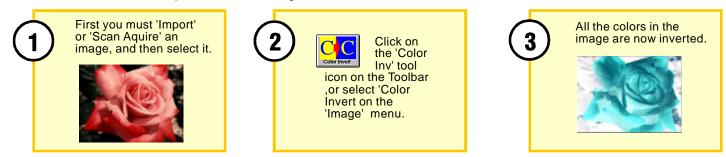
Cancels the 'Image Preview' and 'Auto Palette' functions, returning the image to its original state.

#### **Image Preview**

Selected settings will be applied to the image as a preview. To change back select the 'Image Reset' button.

#### Image Controls Color Invert

The 'Color Invert' command **reverses** the **colors** of an image. For example, black parts of the image are made white. Note: Images created in this program are vector based, and you **can't invert** them unless you export and save them in another bitmap format like 'EPS', and then import them for inverting.



#### **Image Resample**

The 'Image Resample' command changes the detail of an image by changing its **resolution**. Note: Images created in this program are **vector** based and **cannot** be 'Resampled'.



lower resolution use less disk space, and working on the image is quicker. Once you have chosen the values select 'OK'.







One way you can use the combine function is to **mask** a **bitmap** object.

Note: You must have 'Full Render' selected in the 'View' menu for results to be seen correctly on the screen



To mask a bitmap object, place a **vector** object in **front** of the bitmap. The color of the vector object does not matter, it will be ignored. Select the objects, and then choose 'Combine Objects' from the 'Arrange' menu, or press the 'Combine' tool icon on the Toolbar.





Before Combining Objects

Final Result

You can also create a **reverse mask** effect. If you have used a vector object to mask a bitmap object with the 'Combine Objects' function, you can use 'Reverse Mask' to make the vector object 'punch through' the bitmap, as pictured below.



1) Select the object that you masked with the combine command.

2) Select 'Reverse Mask' from the 'Image' menu, or press the 'Reverse Mask' tool icon on the Toolbar. The mask will be now be reversed.





Masked Bitmap

After Reverse Mask

PAGE O4

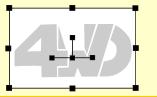
#### Image Controls Vectorise

Once you have scanned an image into your computer, you need to change it into a format that can be recognised for cutting.

O Just as graphics, shapes and text you create are made of **vector** outlines, so too must any image you scan if you want to be able to **cut** it. This process is to 'Vectorise' an image.

You have a great degree of control over the way images are vectorised, but also it is easy for people unfamiliar with the process to achieve **high quality** results efficiently.

To vectorise an image, first 'Import' or 'Scan Aquire' an image, and then select it:





Click on the 'Vectorise' tool icon on the Toolbar, or select 'Vectorise' from the 'Image' menu. The Color Reduction dialog box will appear. If you would like to reduce the number of colors in your image, choose the settings you require and press 'OK'. If you don't wish to alter the number of colors, press 'Cancel'. The Vectorise dialog box will appear.

#### Setup

Click on the button to select various settings for different images. Look at the **quality** and **type** of image. Is it mostly lines or curves? Several examples are given with each setting. Selecting the right setup will produce very accurate results.



### **Color Vectorisation**

If the vectorise process results in some *white space* between overlapping objects, you need to select 'Overlay Colors'. If however you wish to **save vinyl**, selecting 'Inset Colors' will discard parts of objects hidden by overlapping.

Once you have chosen the settings, select 'OK' to vectorise the image. NOTE: The original image will be left **underneath** the vectorised image, and will be the **selected** object. You to can move or delete it.

#### Image Controls ImageCut

ImageCut is a powerful method for reproducing **photographs** on **vinyl**. ImageCut converts photos (including color photos) into a series of horizontal stripes which can be cut using a vinyl cutter. ImageCut can also place **weeding tags** on each stripe to make weeding easy.

Once you have scanned or imported a photograph, select it and choose 'Image Cut' from the 'Image' menu. The 'Image Cut' dialog box appears:

#### **Output Size**

Sets the size the image will be on your sign. While you can change dimensions here, it is recommended these boxes be used to see the dimensions, as the other variables create the output size. For example: if you import a square you must have a square output. Note: The height of the output is always the number of stripes times the stripe width.

#### Minimum Black & White

Minimum black sets the width of the **stripe** and minimum white sets the **space** in between the stripes. The lower the setting the **sharper** the picture, having the settings too high reduces the resoulution. The **0.20** default is usually sufficient, and makes weeding easy.

Note: Increasing the black width makes the image **darker**, increasing the white width makes the image **lighter**.

lmuga Siza:	1024 X 768 Pixels		
Output Size	Horizontal	-8.44	Xcm
	Vertical	61.33	Hel
Output Details	Number Of Lines		in the
	Line Width	.61 💠	33
	History Black Width	.20	18.28
	Minimum White Width	.20	199
Waading Taga	🛃 Left 🛛 🖻 Fi	oM.	
Color			

#### **Number of Lines**

Selects the number of stripes the output will have. More stripes creates more detail, but makes weeding harder. Generally **40** lines for low detail or **80** lines for a highly detailed photo is enough.

#### **Line Width**

Sets the vertical width each stripe works within. This will largely depend on the other settings you choose.

#### Color

You can create full color photographs using special **translucent vinyls**. Click on this box and four separate **CMYK** versions will be generated for cutting. Notice the different angles of each color, and be carefull with registration.



Click 'OK' to cut the picture once you have selected the settings. The image will appear towards the bottom left corner of your sign ready for cutting.

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		-

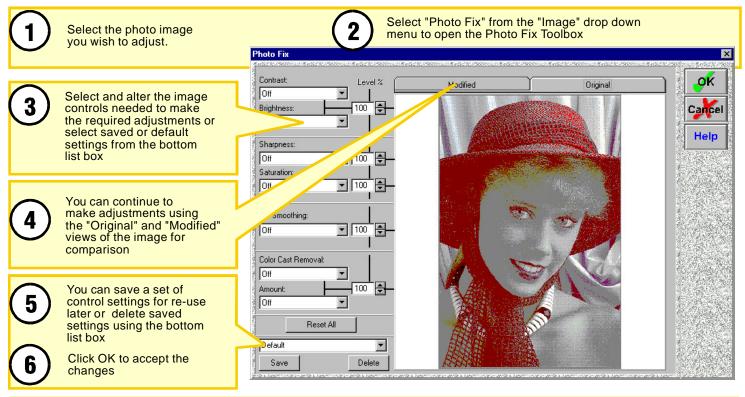
#### Weeding Tags

Puts tags on left, right, neither or both sides of the graphic to make weeding easy.



#### Image Controls Photo Fix

Photo Fix is a most comprehensive collection of tools placed into a single toolbox which allows the beginner and expert alike to make all the adjustments necessary to print professional quality bitmapped photographic reproductions



In order to understand the use and effects of the range of image controls available in Photo Fix you can open the sample files provided with the program. Each file shows a "Before" and "After" photo image and gives the name of the default setting used to achieve the results.

The sample files are found on your installation CD and are named: PHOTOFIX-1.SBD PHOTOFIX-2.SBD PHOTOFIX-3.SBD and PHOTOFIX-4.SBD

#### Image Controls Mode Tool

The "Mode" tool lets you convert a bitmap into the 'color depth' best suited for an application. The greater the depth the more information must be stored the describe each bitmap picture element. Smaller depths create smaller file sizes but fewer colors can be represented.



To convert a bitmap to a different color depth, select the "Mode" tool from the "Image" menu. A menu fly-out will open. Color depths available for the selected bitmap will display as solid.

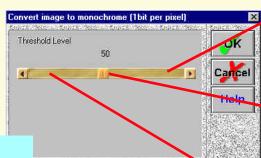
Select 24 bit for full color Largr Format printing. Select 'Grayscale' for color representation on black and white printing. Indexed 4 and 8 bit create small color files useful for Internet publication. Monochrome (1 bit) bitmaps can be vectorised for vinyl cutting.

#### **Converting Color Images into Monochrome (1bit)**

Color images including photos can be reduced to monochrome (1 bit) bitmaps which you can then vectorize for single color vinyl cutting. Select the color image. Select "Mode" from the "Image" menu and select "**Monochrome** 

- 1 bit" from the fly-out.

3



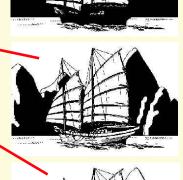
A window with a threshold level will open.

Moving the threshold to the right causes lighter colors to convert to black.

Moving the threshold to the left converts darker colors to white. Click "OK" when the degree of detail or level conversion is correct.

You can vectorise the monochrome bitmap for single color vinyl cutting.
 If you want a multiple color vinyl image, use the "Color Reduction" tool rather than the "Mode" tool.

2





graphic and crop away the areas not required.

#### Image Controls Cropping Bitmap Objects

Tools Settings Help

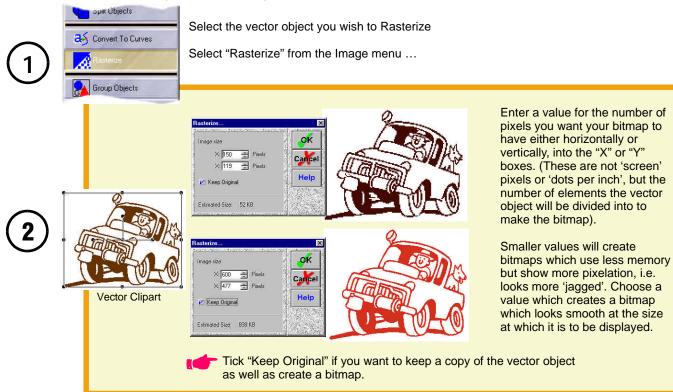
Scan Acquire...

Scan Select Source Select the bitmap object you wish to crop - the bitmap may 🔏 Mode be color, greyscale or black and white. Select the "Crop" tool from the "Image" menu. Color Invert A red 'cropping box' will appear around Photo Fix The outside of the selected bitmap. Color <u>R</u>eduction Re<u>s</u>ample 111 Drag the sides or corners of the cropping box to the size and area you wish to keep. ImageCut Everything outside this box will be discarded. You can also click your mouse inside the cropping box and drag the box to any location on the bitmap Click on "Select" to crop the bitmap. Everything outside the cropping box will be discarded (cropped). Use the "Mode" tool on the "Image" menu to change the bitmap depth or the "Resample" tool to choose a new resolution. PAGE O9

The "Crop" tool allows you to select the area of interest in a photograph or other bitmapped

#### Image Controls Using the Rasterize Tool

The "Rasterize" tool allows you convert a vector drawing or object into a bitmap. This is the reverse action to the Vectorize tool. You may need to place a bitmapped representation of vector objects into documents for publication in a desktop publishing application or pages prepared for a web site.



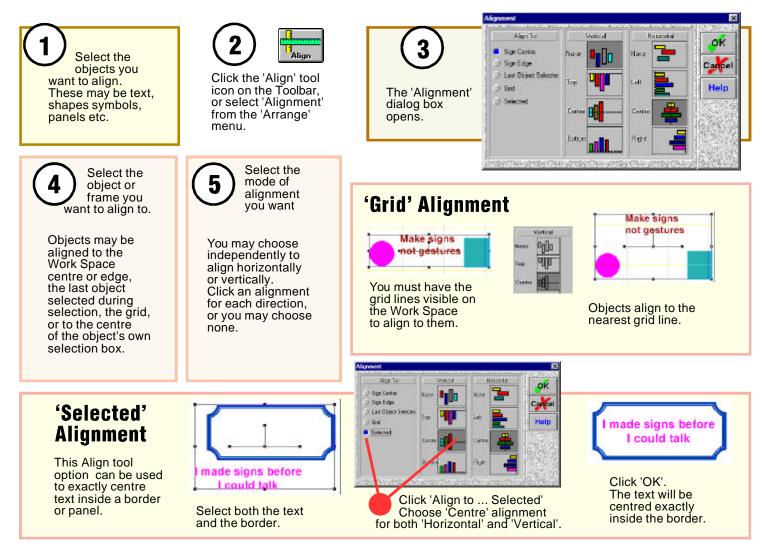
3

The bitmap which is created has a depth of 24 bit color. You can reduce the memory size of the bitmap object by using the "Mode" tool if you need to.

If the bitmap is for use as a monochrome object it can safely be reduced to a "1 bit" depth or where a few basic colors are displayed, 4 or 8 bit depth may be satisfactory.

#### PAGE O10

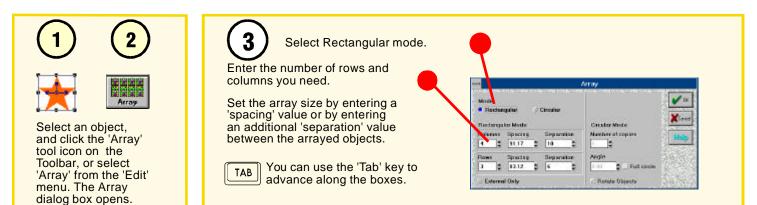
#### **Using The Align Tool**

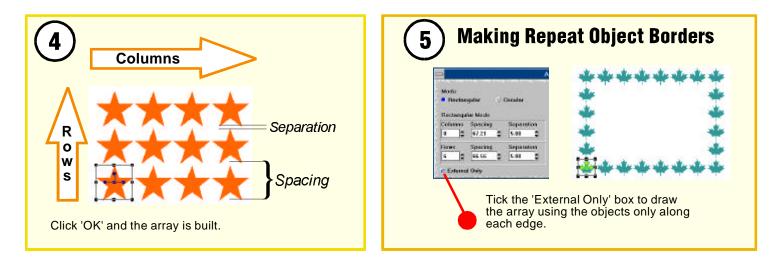


PAGE P1

#### Making Arrays Rectangular Arrays

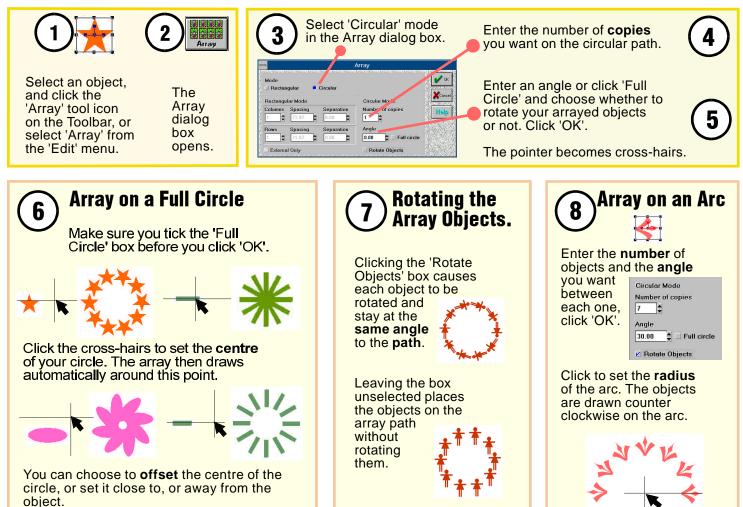
You can **replicate** as many objects onto the Work Space as you wish, and you can also have them **arranged** into neat rows and columns.





#### Making Arrays Circular Arrays

You can use the Array Tool to place objects onto a circle or an arc.



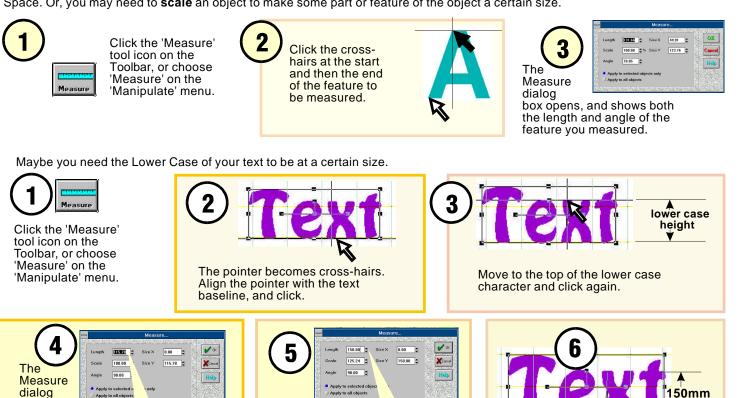
#### Measuring

Click 'OK' to have the text

redrawn at the new scaled

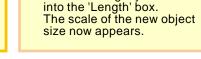
size.

The 'Measuring' tool allows you to measure the **length**, **height** or **angle** of anything on your Work Space. Or, you may need to **scale** an object to make some part or feature of the object a certain size.



The height you just measured is shown in the 'Length' box.

box opens.



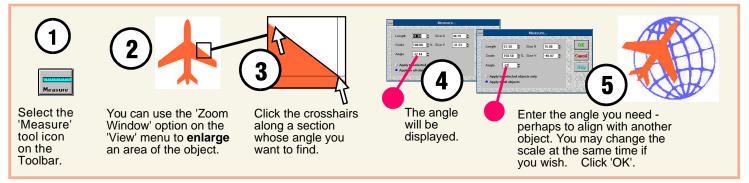
Click 'Select' to finish using the Measuring tool.

Enter the height you want

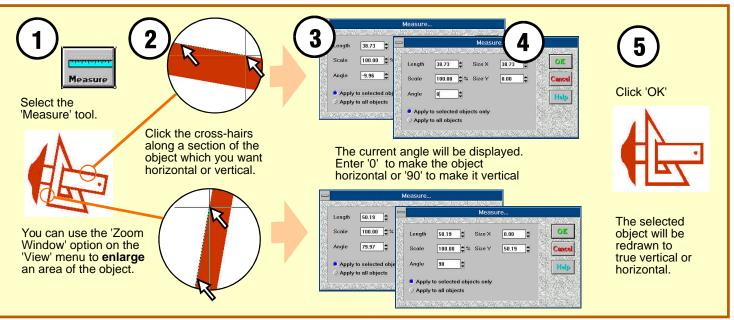
PAGE R1

#### Measuring Angles

The 'Measure' tool can be used to rotate an object using the angle of one of its parts.



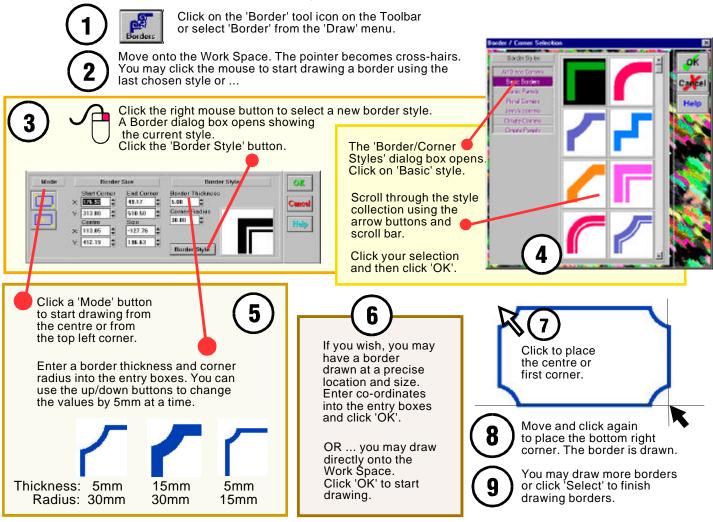
After rotating an object, you may wish to return it to true horizontal or true vertical. The Measure tool can be used to do this.



PAGE R2

#### Drawing Borders Basic Borders

Drawing borders - even basic ones - would be a tedious task if each corner had to be individually drawn, rotated, aligned and connected. A rapid border drawing tool is provided.



PAGE S1

Borders

Start Corner

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325.34

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B-10

A rapid border drawing tool for drawing borders with elaborate and detailed corners, is provided.

> Click on the 'Border' tool icon on the Toolbar or select 'Border' from the 'Draw' menu.



Move onto the Work Space. The pointer becomes cross-hairs. You may click the mouse to start drawing a border using the last chosen style and thickness, or ...



Mode

5

6

Border Size Border Style OK End Comer Border Thickness 586.74 20.00 5 325.34 Size

Enter a value into the 'Border' Thickness' box, or use the up/down buttons to change the value by 5mm at a time (Try small values first, like 10mm.).

**Border Style** 

If you wish, you may enter co-ordinates into the entry boxes to have a border drawn at a precise location. You may choose the centre or corner mode. Click 'OK' to draw the border.

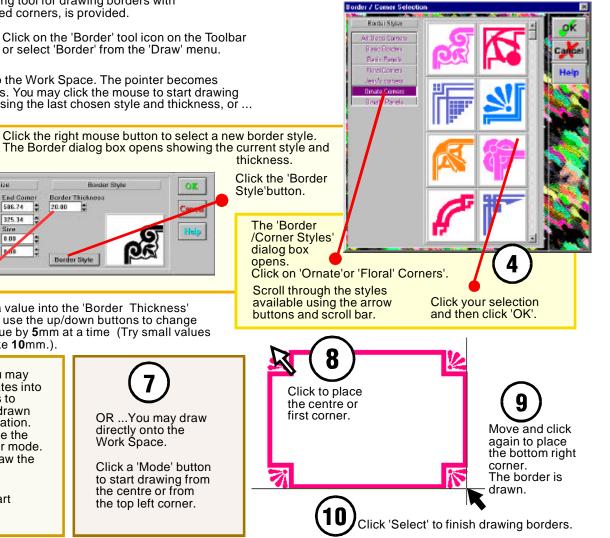
Click 'OK' to start drawing.



OR ... You may draw directly onto the Work Space.

Click a 'Mode' button to start drawing from the centre or from the top left corner.

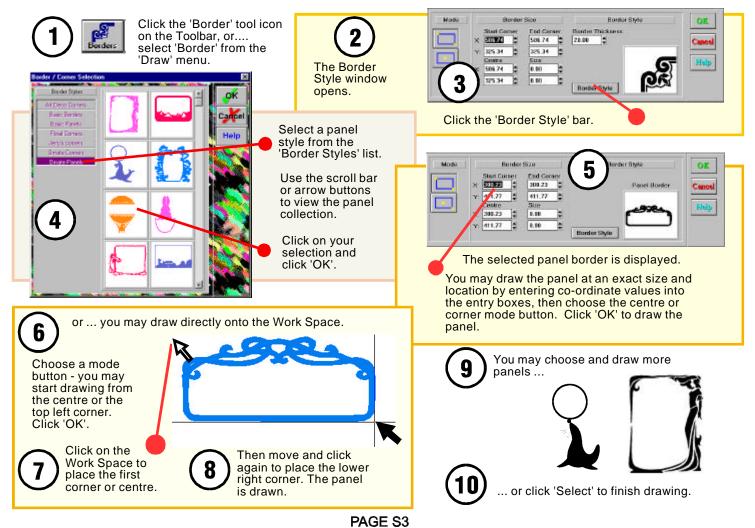
#### **Drawing Borders Borders With Ornate Corners**



PAGE S2

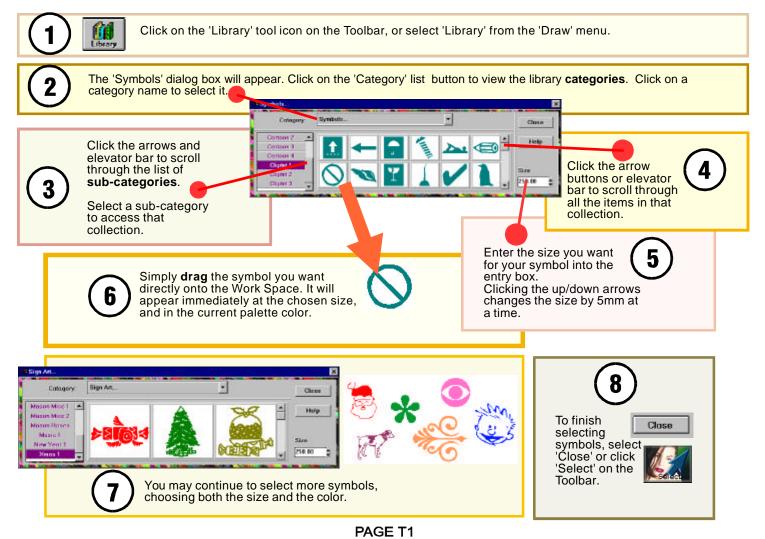
#### **Drawing Panels**

Not all border styles have four similar corners. A library of symmetrical and asymmetrical panel borders in basic, art deco, novelty, ornate and period styles is provided.

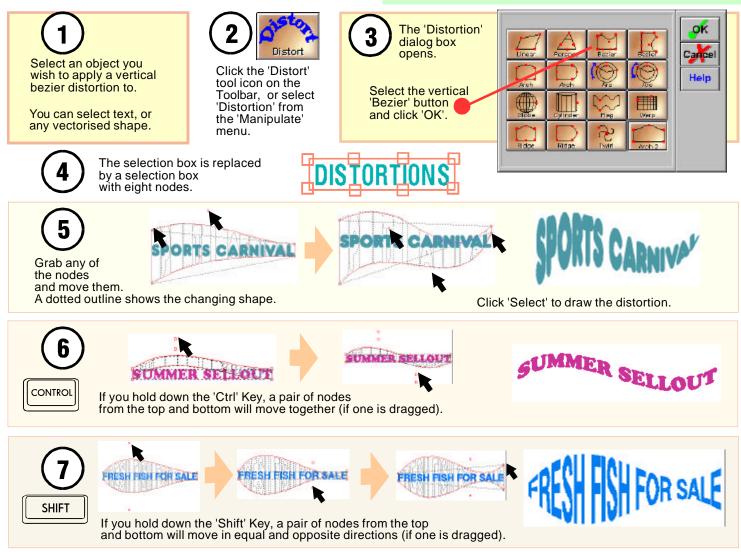


#### Using the Symbol Library

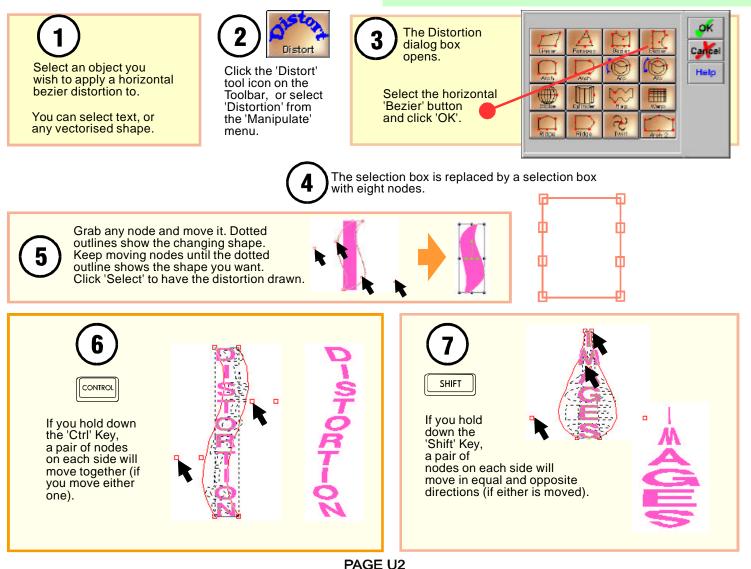
A library of symbols, signs, separators, shapes, logos, sign elements, design elements and sign art is provided to aid in the rapid development of artwork for signs.



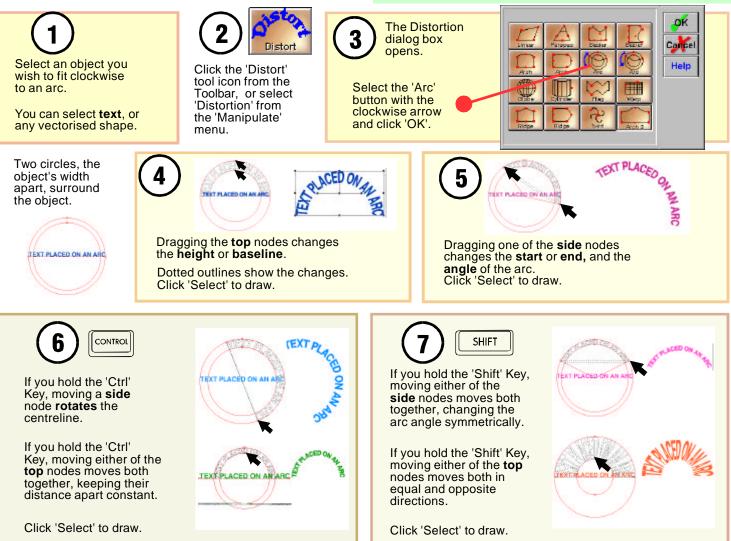
#### **Creating Distortions** The Vertical Bezier Distortion



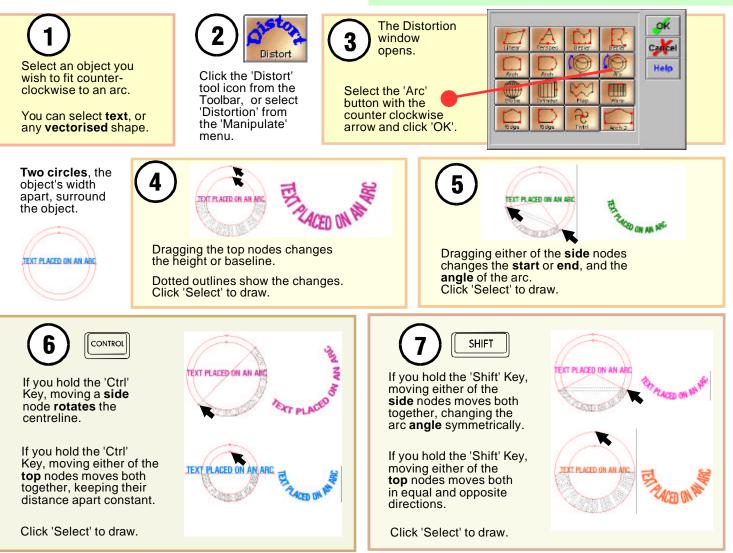
#### **Creating Distortions** The Horizontal Bezier Distortion



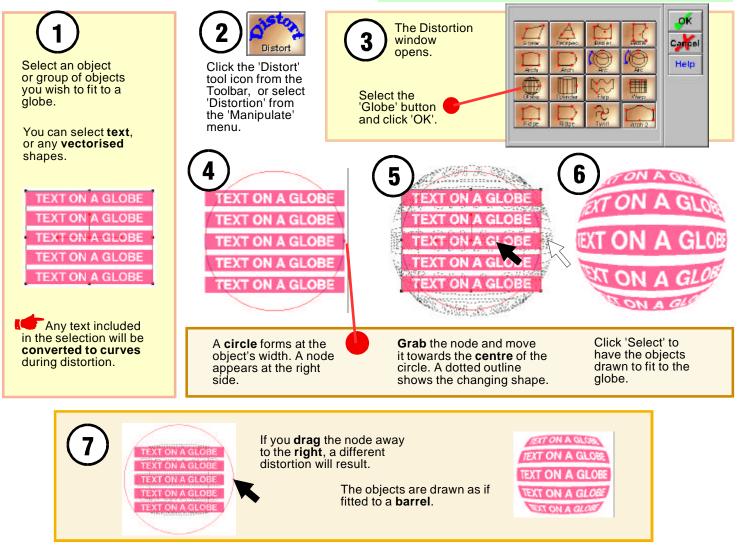
#### **Creating Distortions** Fit To Arc (Clockwise)



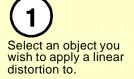
#### **Creating Distortions** Fit To Arc (Counter-Clockwise)



#### Creating Distortions Fit To A Globe



#### Creating Distortions Linear Distortions

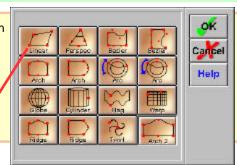


You can select **text**, or any **vectorised** shape.



Click the 'Distort' tool icon from the Toolbar, or select 'Distortion' from the 'Manipulate' menu. 3 The Distortion window opens.

Select the 'Linear' distortion button and click 'OK'.



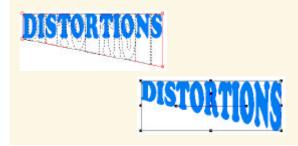


The selection box is replaced by a selection box with **corner** nodes.



You can grab any node and move it.

A dotted wire-frame outline shows the changing shape.







Click 'Select' to have the distortion drawn on the Workspace.

Text is converted to curves in the distortion process, and can't be edited as text afterwards.

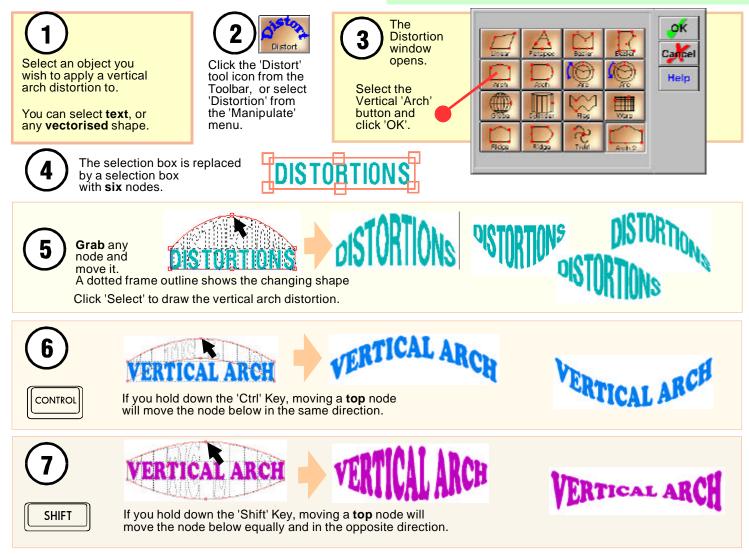
#### Creating Distortions Perspective



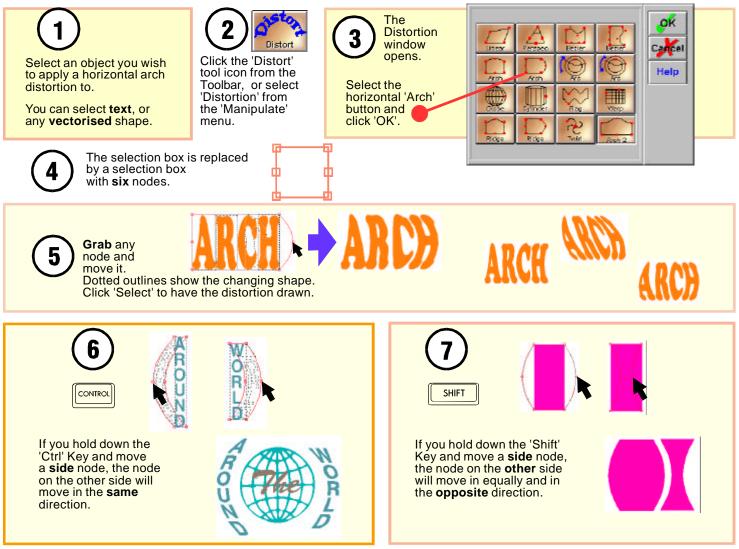


Click 'Select' to have the object drawn with the new perspective.

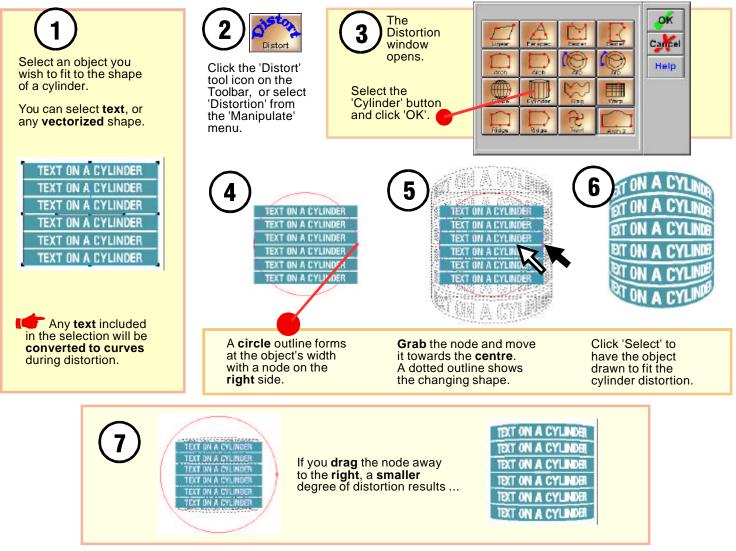
#### **Creating Distortions** The Vertical Arch Distortion



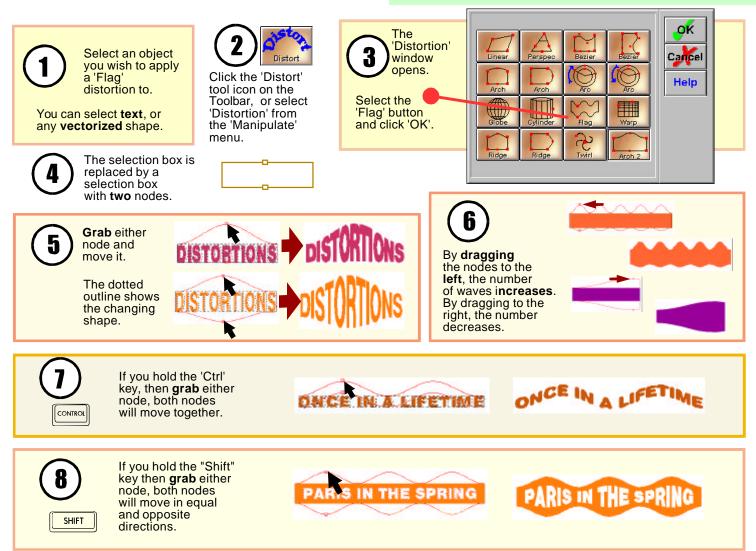
#### **Creating Distortions** The Horizontal Arch Distortion



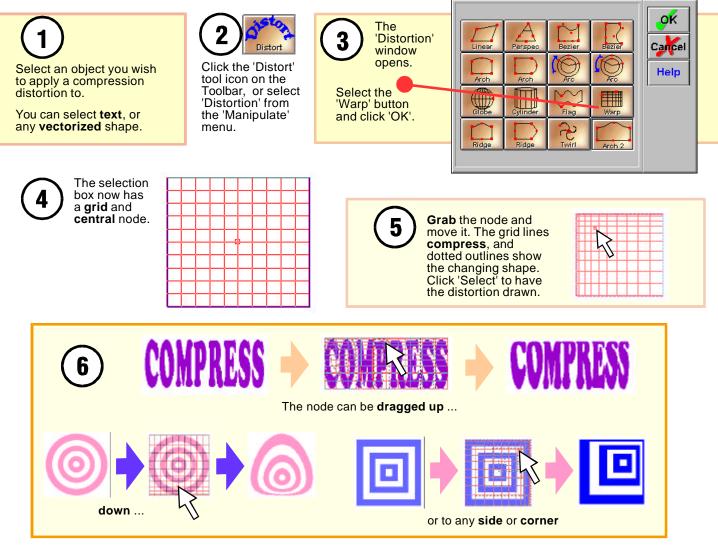
#### Creating Distortions Fit To Cylinder



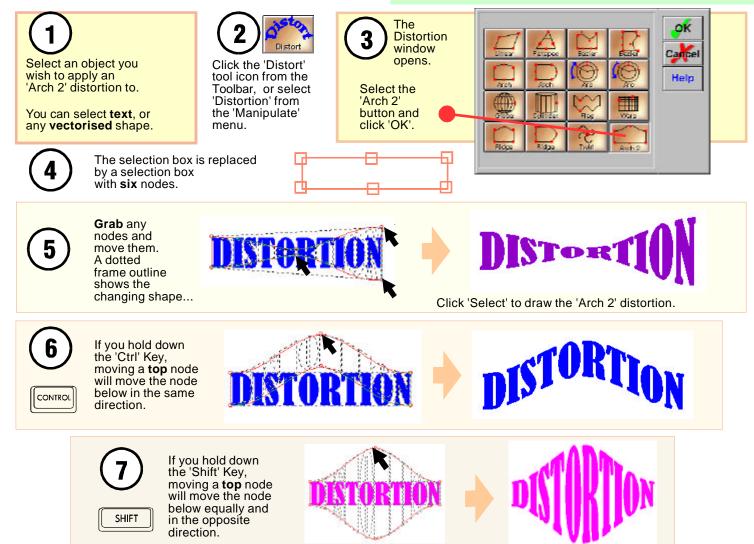
### Creating Distortions The Flag Distortion



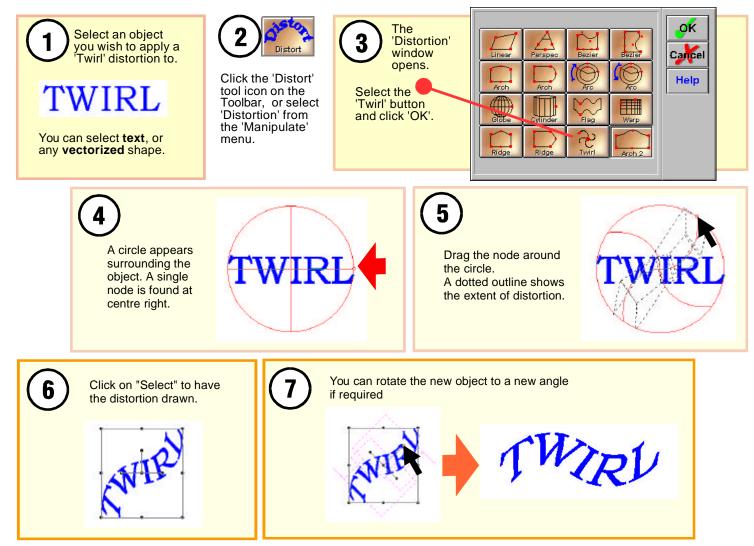
### **Creating Distortions** The Warp Distortion



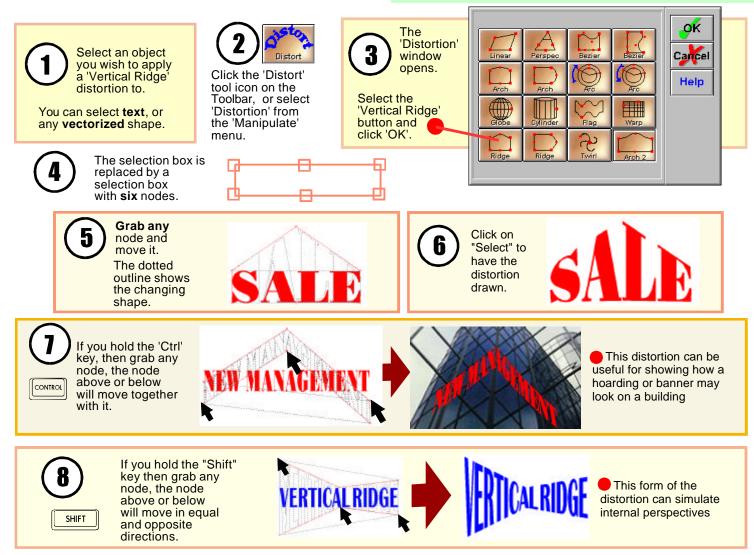
## Creating Distortions The Arch 2 Distortion



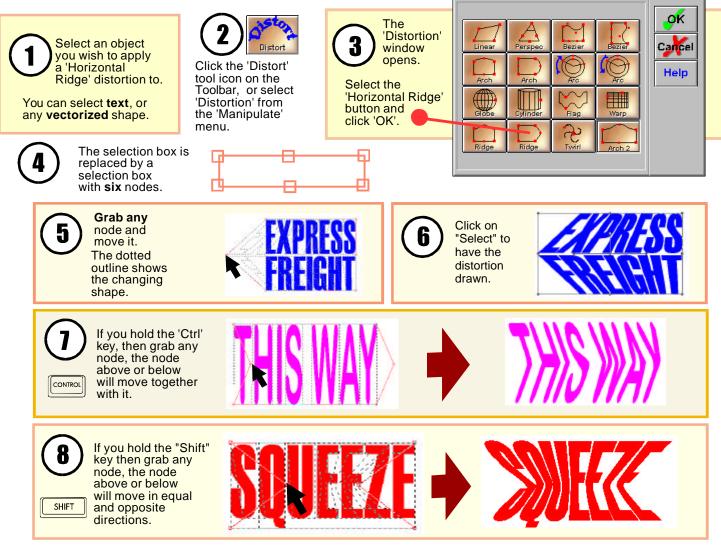
### **Creating Distortions** The Twirl Distortion



## **Creating Distortions** The Vertical Ridge Distortion

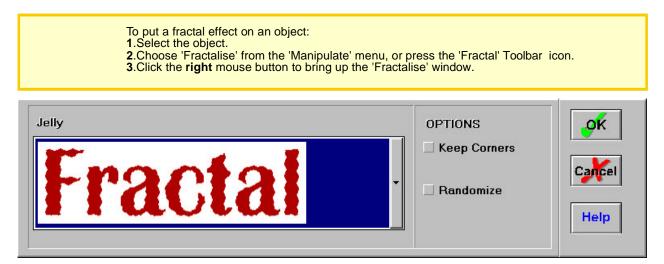


### **Creating Distortions** The Horizontal Ridge Distortion





As well as special effects and distortions, you can apply fractal effects to objects. You can apply fractal effects to the edges of an object to give each object a unique outline. There are twelve different fractal effects from which to choose.

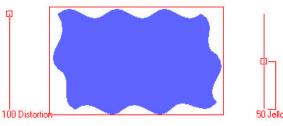


4.Click the large button beside the 'Fractal' graphic to bring up a list of fractal effects.
5.Choose the fractal effect you want (the graphic of the word 'Fractal' gives an example of each effect).

6.If necessary, select the options for 'Keep Corners' and 'Randomise'.

7.Select 'OK'.

8.You can click on any displayed red node(s), and **drag** up or down to determine the level of effects. 9.Choose the 'Select' tool icon to perform the effect.





This command provides a quick and easy solution for simulating color gradation on vinyl. There are **four** blend effects, and a number of options that you can use. When viewed from a distance, the color of the object will appear to **blend** from one color to another.

To color blend an object:

**1**.Select the object.

2. Choose 'Color Blend' from the 'Manipulate' menu, or press the 'Blend' Toolbar icon.

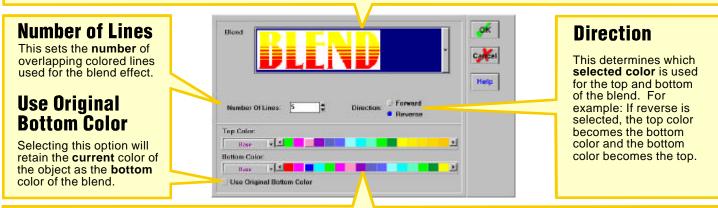
3. Click the right mouse button to bring up the Color Blend dialog box.

4.Select the options detailed below and select 'OK'.

**5**.You can vary the blend by grabbing and dragging any of the nodes, as shown in the picture to the right. Once you have made a final decision. choose the 'Select' tool icon on the Toolbar, to perform the effect.

### Blend

Click the large substant beside the 'Blend' graphic to bring up a list of color blend effects. The graphic of the word 'Blend' gives an example of each effect. Choose the desired effect.



### **Color Palette**

To change to **another** color palette, click on the palette name. A full list of available palettes will appear. Click on the desired palette name.

### **Top/Bottom Color**

Click on any square to select the top or bottom color of the blend.



The 'Color Medley' command consists of various functions that have different effects on the **color** of the selected object. The functions are: transparency, invert background, darken/lighten, color add/subtract, outline only. **Note:** You must have "Full Render" selected in the "View" menu to correctly display these effects on screen.

Select an object. If you are going to use color modes - 'Invert Background', 'Darken/Lighten' or 'Color Add/Subtract', place the selected object in front of the objects that you are going to perform the effect on.



Transparency

| K | 0

Select "Color Medley" from the 'Effects' menu or select the 'Col Medley' icon from the Toolbar to open the Color Medley dialog box.

Choose a mode from the 'Color Mode' drop down list You can learn more about each mode with examples by opening its sample file while running the program. Sample files are found on your installation CD in the folder \SB5Samp1

### None

Removes the effect of the other 'Color Medley' options that are described here.

### **Transparency**

Makes the object fully or partly transparent, so that objects behind the selected object will be partly visible.

• Open the sample file: \SB5Samp1\COLR-MED-1.SBD

## Invert Background

The selected object will invert the color of objects **behind** it, including the background.

• Open the sample file: \SB5Samp1\COLR-MED-2.SBD

## Darken / Lighten

Preview

The selected object will affect the **brightness** of any objects behind it, rather than its own brightness.

• Open the sample file: \SB5Samp1\COLR-MED-3.SBD

## **Outline Only**

×

.OK

Cancel

Help

When you use this option, only the outline of the selected object will be visible.

• Open the sample file: \SB5Samp1\COLR-MED-5.SBD

## Color Add/Subtract

The color of the selected object will be added/subtracted to the color of any objects behind it.

• Open the sample file: \SB5Samp1\COLR-MED-4.SBD

If you wish to see what effect your selections will have on the object, without committing yourself to the result, click on the 'Preview' button.

Color Medley

Color Mode

Amount

4



Press 'OK' to accept your selections The object will be rendered with the new settings



The 'Fill Attributes' **Gradient Fill** creates a stepless linear color fill for the selected object. The color fill of the object will merge smoothly from one color into others. You are also able to vary the number and position of colors, and the angle of the fill effect. You must use a Windows display driver that can display **more than 256** colors and you must have

"Full Render" in the 'View' menu selected for these effects to be displayed correctly.

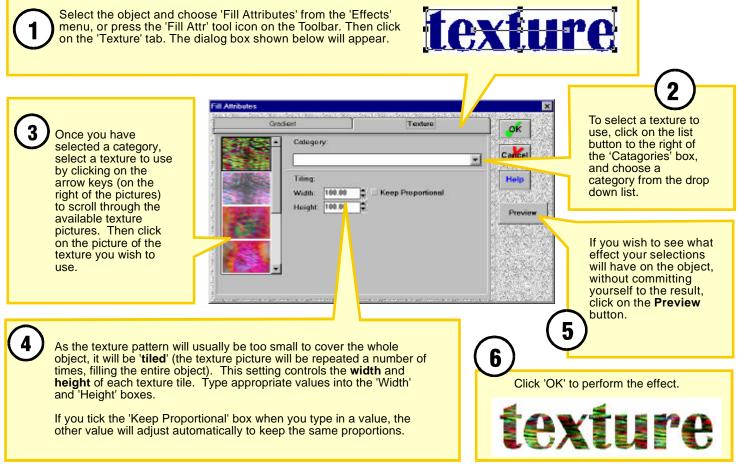
Select an object and choose 'Fill Attributes' from the 'Effects' menu, or press the 'Fill Attr' tool icon on the Toolbar. The 'Fill Attributes' dialog box will appear. ill Attributes Select the 'Gradient' fill tab Gradient Texture Preset Category: You can select one of the library of Preset Cance color gradients by clicking the list arrow and selecting from the drop-down list... Sky Help 1 main Sky Delete Name: ave 2 ID DO N Preview Position: Angle: 45.0 3 DEDU DODU 5 Or you can create your own fatasy. - -Greve You can create your own gradient by clicking on color arrows and moving them to new positions along the gradient and changing 5 their color. You can 'drag' an arrow or use the 'Position' entry box to move it. You can add If you want to save more arrows by clicking between other arrows, your new gradient, or select an arrow and press 'Delete' to enter a name into the remove it. 'Catagory' and 'Name' With an arrow selected you can assign a color entry boxes and click to it from any of the color palettes. on 'Save'. Use the You can change the 'angle' of the effect 'Delete' button' to from the 'Angle 'entry box - enter an angle remove an unwanted or use the up/down arrows. gradient. Select 'Preview' to see the fill effect before committing to it. Click 'OK' to draw the fill.



The texture command will fill an object with a colored texture picture.



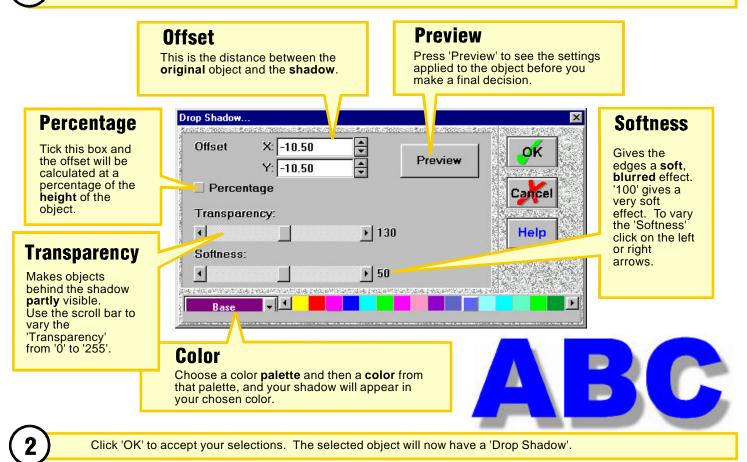
You must have "Full Render' in the 'View' menu selected for this effect to be displayed correctly





This function adds a drop shadow to the selected object. This type of shadow can have **transparency** and can be **blurred**, making it quite realistic.

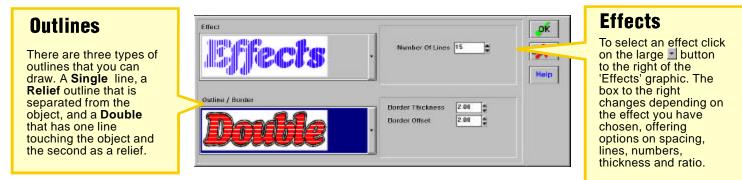
To use this command, first select the object. Then select 'Drop Shadow' from the 'Effects' menu, or press the 'Drop Shad' tool icon on the Toolbar. The dialog box shown below will appear.



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## **Fill Effects** Special Effects

There are many different special effects that can be applied to objects to create a distinctive look. To apply a special effect to an object, select the object and type 'X' on the keyboard, or select 'Special Effects' from the 'Manipulate' menu, or click on the Toolbar icon 'Special Effects'. To bring up the 'Special Effects' menu, click on the **right** mouse button.



For all effects, when you select the effect, a WireFrame appears on the Work Space with a number of nodes (i.e. small red squares), which gives you further control. An example of all **ten** effects is shown below. On the Circle, Star and Shatter effects clicking the **left** mouse button on the object re-draws the effect in new random locations.

Horizontal Lines	Circles	Stars	Shatter	Gradient	
Gr	radient 2	Sun Burst	Vertical Lines	Vertical Gradient	Vertical Gradient 2

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## Fill Effects Linear Transparency

The Transparency tool allows control over both the gradation and profile of transparency applied to selected objects. Variable transparency can be applied to both vector and bitmap objects

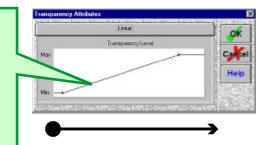
Select the object to which a transparency profile is to be applied. You may select vector objects as well as bitmap objects. Select "Linear Transparency . . " from the "Effects" menu

An arrow will appear across the object you have selected. The arrow has a ball shaped base and a pointed arrow head. You can grab the head and the base with the mouse and relocate them to where you want your transparency profile to start and end.

3

A window also opens in which you can grab and move the nodes on a line which represents the profile of transparency applied to the arrow.

A level line gives equal transparency across that section of the arrow
 An inclined line causes gradation of transparency across that section of the arrow



1



Click OK to close the Transparency Attributes window. The chosen profile will now be seen applied to the object

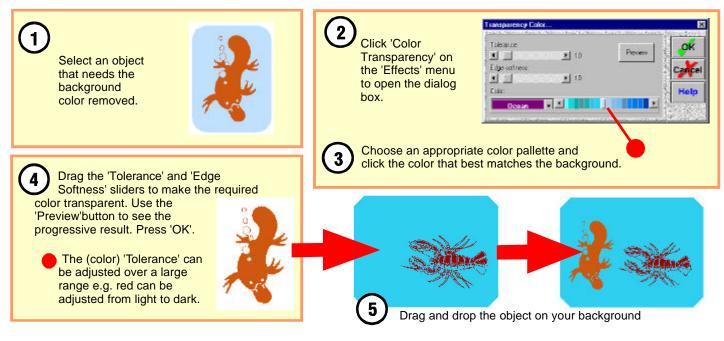
### Fill Effects Color Transparency

This versatile command makes only selected objects of the selected color transparent. This effect can be applied to both vector and bitmap objects.

Using this tool you can for instance:

- 1) remove the background color of pictures/photos so that the pictures/photos can be placed on top of other objects
- 2) select a vector color in a Linear Transparency and make it transparent.
- 3) select a color in a Texture fill and make it transparent.
- 4) make a color in a bitmap transparent (using the Special Effects command), and therefore could e.g. replace the sky with mountains in the bitmap.
- 5) merge bitmaps (there are also other ways of doing this).
- 6) scan complicated line art (e.g. etching and old illustrations) at the correct dpi, the resulting picture will then have hard black edges (as if the object had been vectorised).

As an example, you could strip an object's background and place it into another picture ...



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## Learning Guide Schedule

### **Edge Effects**

- V1 Expand/ Inline / Outline Advanced Inline/Outline:
- V2 Using Inline/Outline
- V3 Outline Options
- V4 Inline Options
- V5 Using the Online Tool
- V6 Clouding, Changing Weight
- V7 Color Trapping
- V8 Keyline
- V8 White Space
- V9 Glow
- V10 Enhance Round
- V11 Enhance Metallic
- V12 Enhance Neon
- V13 Enhance Chamfer
- V14 Enhance Chamfer Styles

### Welding

- X1 Total Welding
- X2 Punch Through Welding
- X2 Color Weld- Punch Through
- X3 Color Welding
- X3 Common Welding
- X3 Reverse Welding

### **Creating Shadows**

- **Z1** Selecting Styles and Options
- Z2 Block Shadows
- **Z3** Perspective Shadows
- Z4 Solid Perspective Shadows
- **Z5** Drop Shadows
- Z6 Relief Shadows
- Z7 Cast Shadows
- Z8 Extra Shadow Styles -1
- Z9 Extra Shadow Styles -2

### The Node Editor

- **BB1** Introduction
- BB2 Selecting Nodes Opening The Node Editor Toolbox Selecting a section of a Node Path

#### Using Node Edit Tools:

- BB3 Moving Nodes ,
  - Removing Nodes,
  - Adding in Extra Nodes,
  - Changing Node Type
- BB4 Breaking and Joining Paths,
  - Square or Right Angle Tool,
  - Lining Up Nodes
- BB5 'Copy Length' and 'Apply Length' Tools
  - Sharpen Tool
  - 'Copy Angle' and 'Apply Angle' Tools
- BB6 'To Line' Tool,
  - 'To Corner' Tool,
  - 'To Arc' Tool
- BB7 'To Bezier' Tool
- BB8 'Set Angle' Tool
- BB8 'Set Length' Tool
- **BB7** Changing Node Colors
- BB7 Correcting Mistakes Using 'Undo'

# HOUR 5

### **Expand/Outline/Inline**

## **Outline Options:**

An object or text can be expanded to form two kinds of outline - one offset and the other not offset.



Type text or select an object.



B⇒B Expand

Select the 'Expand' tool icon on the Toolbar, or select 'Expand' on the 'Manipulate' menu.

	Expand		
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KeepDrig	10 million		
P Bamove	Xcaro		
🕑 Percento	ige .	-	
Offset	Thickness	Help	
6.00	0.00 \$	- and	

have overlapping outlines automatically welded together.

You can choose to enter the thickness and

offset of the outline in mm. or percentage of the object size. Enter values and click 'OK'.

box opens. Click

You can choose to

enter the thickness and offset of the inline in mm. or percentage of the object size. Enter

values and click 'OK'.

'Keep Original'.

The Expand dialog

'Keep Original'. Click

'Remove Overlaps' to

box opens. Click

	Expand	an area
🔉 Inlino	Outling	V 04
🗹 KeepOri	10	
C Remove	Xine	
🗹 Percente	aða.	and the second
Othet	Thickness	lisip
4.00	5.00 2	- Batters



If the offset is entered as zero, the outline is drawn directly around the obiects.



Offset values cause the outline to be drawn outside the edge of the objects by the offset value.

## **Inline Options:**

The 'Expand' tool can be used to create two kinds of inline - one offset and the other not.



Type text or select an object.

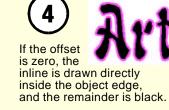


Select the 'Expand' tool icon on the Toolbar, or select 'Expand' on the 'Manipulate' menu.





-	Expand	
<ul> <li>Inline</li> </ul>	O Outline	🖌 ок
KeepOrk	Xered	
Parcante Offset	ige Thickness	Halo
1.5	2.5	

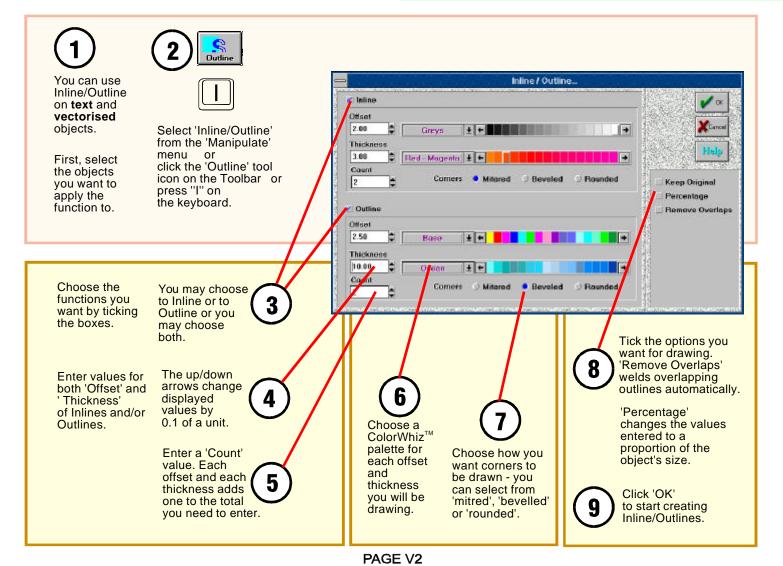


If an offset value is entered.

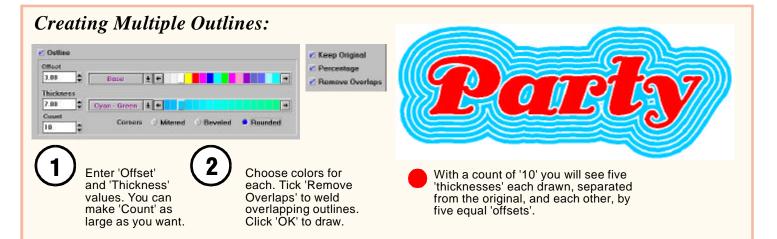


then a white offset band is drawn inside the inline with the remainder drawn black.

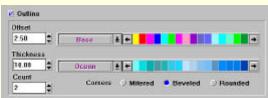
### Multiple Inline/Outline Inline and Outline Options



## Multiple Inline/Outline Using Outline Options



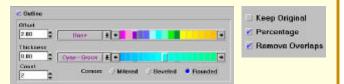
### Selecting a 'Corner' Style:



Select one of the three corner options. Both the offset and the thickness will be drawn with the same corner style. *Mitred* 



## 'Keep Original' Option:

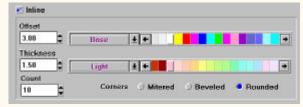


When 'Keep Original' is deselected, the first offset changes so as to also fill the area which the original object filled. The original object is not drawn.



## Multiple Inline/Outline Using Inline Options

## Creating Multiple Inlines:



Enter 'Offset' and 'Thickness' values. You can make 'Count' as large as you want. Choose palette colors for both offset and thickness. Tick 'Percentage' to make values proportional. Click 'OK' to draw.



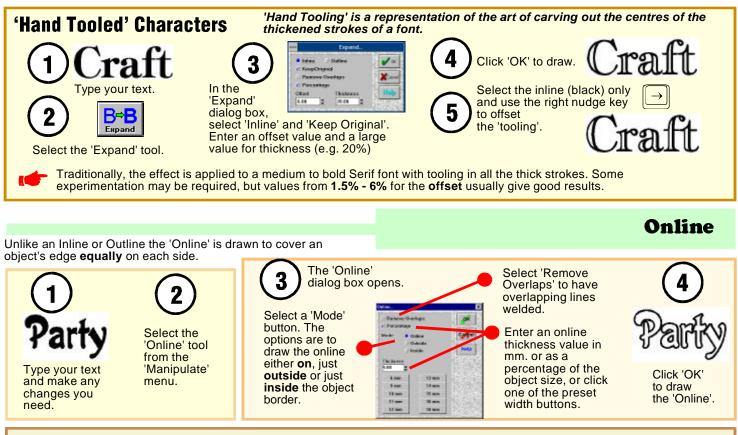


With a count of '10' you will see five 'offsets' and five 'thicknesses' if the object is wide enough. If it isn't wide enough, some inline objects will not be drawn.

Each object will be 'punched through' ready for vinyl inlay if 'Remove Overlaps' is ticked.

#### e isine Selecting a 'Corner' Style: **Offset & Thickness** Official 10 \*\* Colors: Base Select one of the three corner options. Thicknoss Both the offset and the thickness will 5 ... Link be drawn with the same corner style. Court Corners O Mitseed Bounded The second obiect is a 'thickness' in the The first palette color. object 3 is an 'offset' in the The third object is an original Mitred 'offset' and is displayed object's Bevelled in the chosen palette color. Rounded color.

### **Expand** Creating 'Hand Tooled' Characters



### **Cutting 'Hand Tooled' and 'Online' Graphics**



The white 'toolings' and areas enclosed by 'onlines' are overlay shapes which can be cut separately for a vinyl overlay method.





For a vinyl inlay method, first use the 'Punch Through' welding tool.

## Expand **'Clouding' and Character Options**

## 'Clouding'

Setting a large value for an expanded outline is termed clouding. Two styles can be created.

**)Sale** 

Type text or select an object.



Select the 'Expand' tool icon on the Toolbar, or select 'Expand' on the 'Manipulate' menu.



The 'Expand' dialog box opens. Click the 'Outline' button and 'Keep Original'. Click 'Remove Overlaps' to have

overlapping outlines automatically welded together.

You can choose to enter the thickness and offset of the clouding in mm. or percentage of the object size.

Enter values and click 'OK'. Make the offset or thickness over 10% for good results.



Expand.

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Percontage

Different

28



If the offset is entered as zero the clouding is drawn directly around the objects.



Offset values cause the clouding outline to be drawn outside the edge of the objects by the offset value.

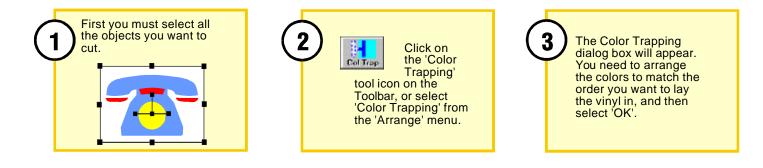
You may wish to 'thicken' a font (such **Changing Weight** as 'Premium') for easier cutting ... 3 Expand Click 'OK' to draw · Duban Indiana. In the 'Expand' dialog box, the new weight. Kereditianel ⇔ select 'Outline' and deselect Description (hand see Percentage 'Keep Original'. Enter a small Expand Dictorate nium thickness and zero offset. 10 Type your text and select the 'Expand' tool icon on the Toolbar.

Be careful when choosing fonts for expanded weight change. Unless the characters of a font have equal thickness all over, an expansion will alter the ratios between thin and thick parts of the characters. For example, expanding any serif font will produce a font with very thick serifs.

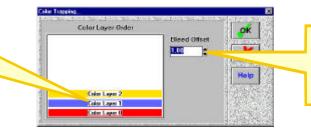
### **Color Trapping**

You can use 'Color Trapping' to eliminate white space between objects of different colors. Often when laying vinyl, shared borders will have a **small gap** between the edges. 'Color Trapping' **bleeds** the objects and colors on the lower level **under** the objects and colors of the higher level by **adding** extra vinyl to the overlapping edges.

When making screens for **screen printing** the same procedure applies.



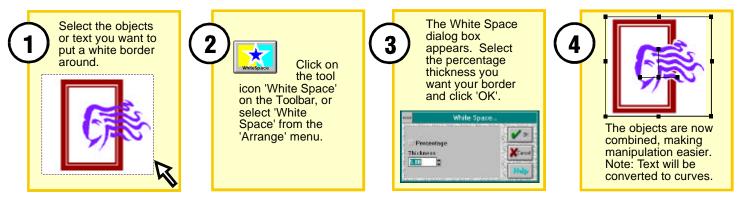
To move a color to a new position, simply click on the color bar and drag it up or down.



The 'Bleed Offset' is the width in millimetres or inches of the vinyl 'Tag' attached to the objects.

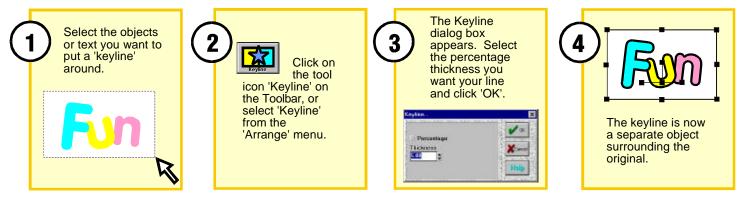
## Edge Effects White Space

'White Space' lets you draw a **white border** around the selected object. This can often make the selected object stand out.



## Keyline

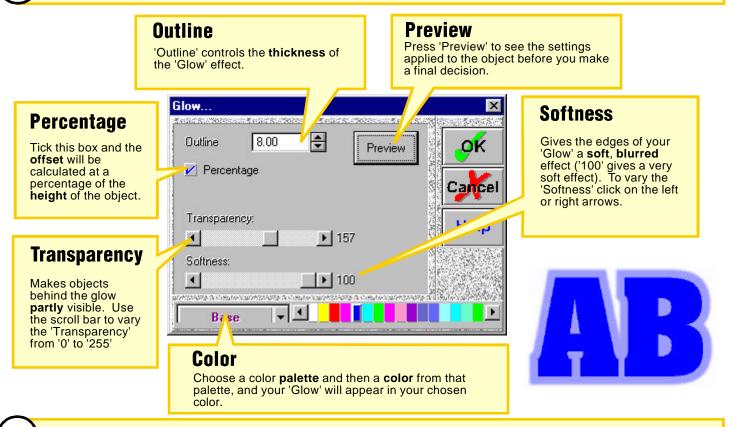
Keyline draws a black border around each individual selected object. This is an alternative to the outline command, which draws a border around the whole group of selected objects.



**Edge Effects** Glow

This command makes a 'glow' effect around the selected object. "Full Render" must be selected on the 'View' menu for this effect to be correctly displayed on the screen. Pressing 'Cntl' + 'F' keys turns 'Full Render' on and off.

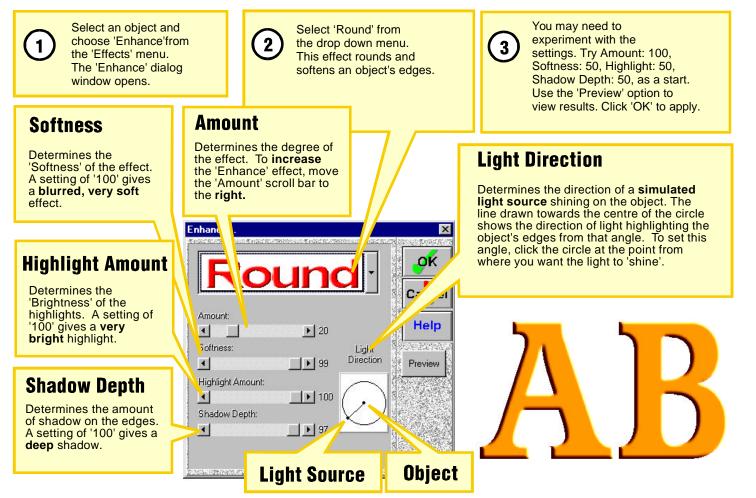
To create a 'Glow', first select an object. Then select 'Glow' from the 'Effects' menu, or press the 'Glow' tool icon on the Toolbar. The dialog box shown below will appear:



Click 'OK' to accept your selections. The selected object will now have a glow effect.

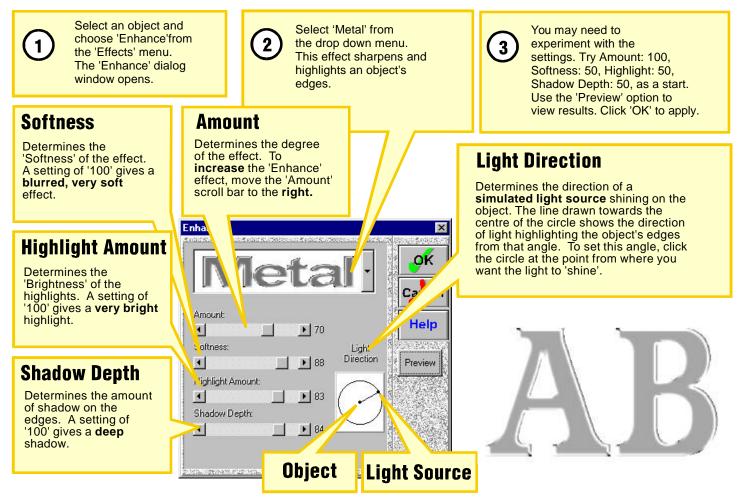
### Edge Effects Enhance - Round

'Enhance' effects apply a **three dimensional** look to an object, by applying **highlighting** and **shadows**. "Full Render" must be selected on the 'View' menu for this effect to be displayed correctly on the screen Remember to **group the object together with all its enhancements** before moving, rotating or sizing them.



## Edge Effects Enhance - Metallic

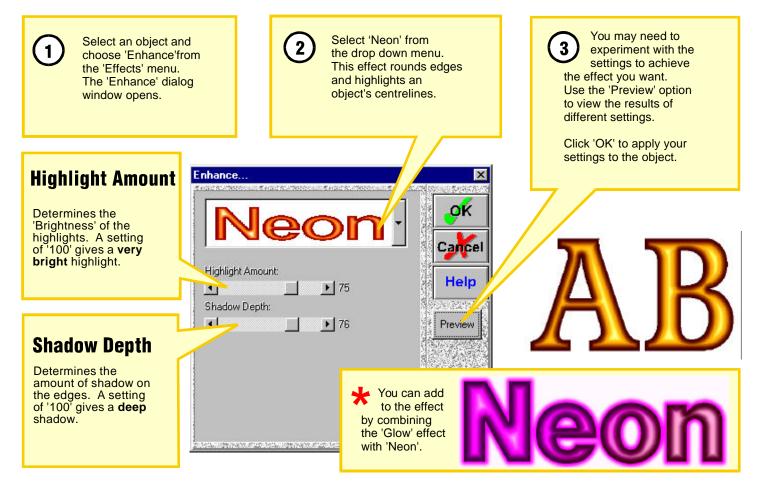
'Enhance' effects apply a **three dimensional** look to an object, by applying **highlighting** and **shadows**. "Full Render" must be selected on the 'View' menu for this effect to be displayed correctly on the screen Remember to **group the object together with all its enhancements** before moving, rotating or sizing them.



### Edge Effects Enhance - Neon

'Enhance' effects apply a three dimensional look to an object, by applying highlighting and shadows.

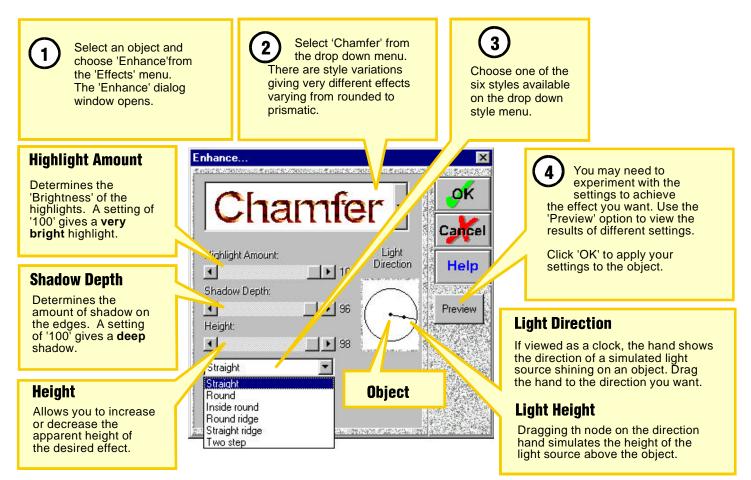
"Full Render" must be selected on the 'View' menu for this effect to be displayed correctly on the screen Remember to group the object together with all its enhancements before moving, rotating or sizing them.



### Edge Effects Enhance - Chamfer (1)

'Enhance' effects apply a three dimensional look to an object, by applying highlighting and shadows.

"Full Render" must be selected on the 'View' menu for this effect to be displayed correctly on the screen Remember to **group the object together with all its enhancements** before moving, rotating or sizing them.

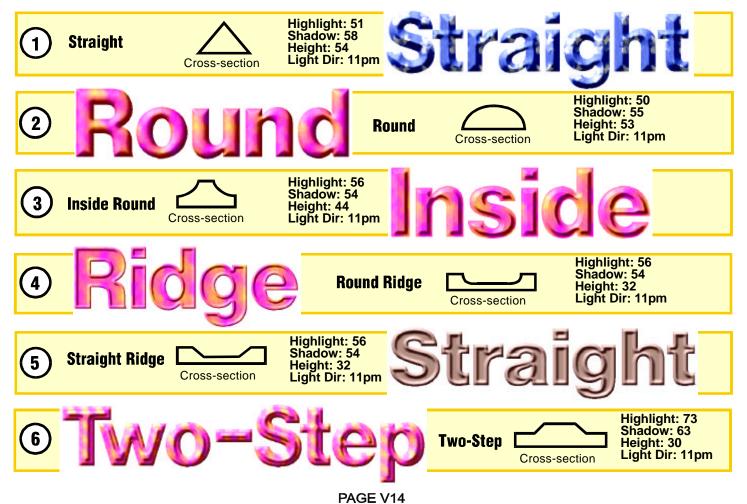


### Edge Effects Enhance - Chamfer (2)

Examples of the 'Chamfer' styles may help you to draw your own. Each example includes the settings used to achieve the illustrated result. You may use other effects on objects, like 'Texture Fill', before 'Enhance'

"Full Render" must be selected on the 'View' menu for this effect to be displayed correctly on the screen

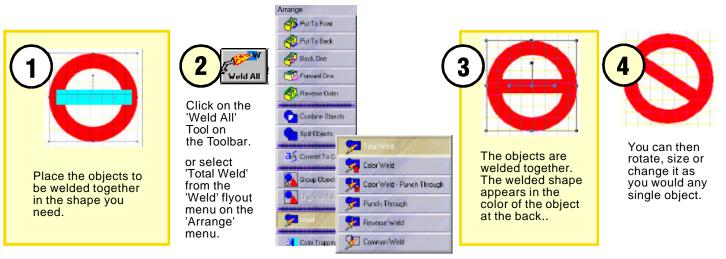
Remember to group the object together with all its enhancements before moving, rotating or sizing them.



## Welding **Total Welding**

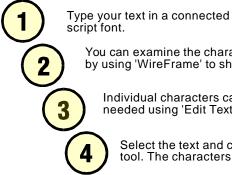
The Total Welding Tool joins separate objects together so that they become one new object with its own single outline. The objects to be welded may be of different colors and can be both shapes and text.

You cannot weld bitmap images - you need to 'vectorise' them first.



PAGE X1

One of the most practical uses of 'Total Welding', is to weld connected script together.



You can examine the character overlaps by using 'WireFrame' to show outlines only

Individual characters can be adjusted if needed using 'Edit Text' on the 'Edit' menu.

Select the text and choose the 'Weld All' tool. The characters will be joined at their overlaps.

Three blind mice

Where bliesd wiece

. Waxee blind aniae

CUT OUT

Place the object you want punched through

behind the object you want to use as a punch.

## Welding Punch Through Welding



Tou cannot weld bitmap images - you need to 'vectorise' them first.

## **Punch Through Weld**

Punch Though welding takes any object placed to the front of another, and cuts its shape through the object behind. The tool is often used to create work for vinyl inlays. Either object can be text or graphics and of any color.



Select 'Punch Through' from the 'Weld' flyout menu on the 'Arrange' menu, or click the 'Punch' tool icon on the Toolbar. CUT OUT

The object used as a punch can now be moved, leaving its shape cut through the other object.

### **Color Weld - Punch Through**

This tool includes functions from both 'Color Weld' and 'Punch Through'. Objects of the same color will weld where they overlap. Objects of a different color and in front, will punch through those behind.





Object (in front) to be used as a

Object (behind)

to be punched through

punch.

Create your work so that objects to be joined are in the same color, and overlap where you want them joined. Create objects to be used as a punch in a different color, and arrange them to the front.



Select 'Color Weld-Punch Through' from the 'Weld' flyout menu.



Objects used as a punch can now be moved, leaving their shape cut through the other objects.

### Welding Color, Common & Reverse Welding

**I** You cannot weld **bitmap** images - you need to 'vectorise' them first.



The Color Welding tool allows all objects of the same color to be welded together where they overlap, but leaves objects of different colors untouched.



Select all the objects which you need to weld. It will not matter if other objects are also selected, provided they are of different colors. You can check positions of all objects by viewing using 'Outline/WireFrame'.

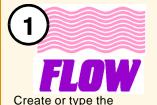
	Total Weld
Ζ	🛜 Calor Weld
	🚂 Color Weld - Punch Through
	🥦 Punch Through
	🥦 Reverse Weld
	9 Common Weld



Select 'Color Weld' from the 'Weld' flyout menu under the 'Arrange' menu.

### **Common Welding**

Using this Welding Tool will leave only those parts of objects that overlap each other. Objects may be of any color, but must not be grouped together.





Place the objects so that the parts that overlap are the parts you wish to keep. Select the objects.



Select 'Common Weld' from the 'Weld' flyout menu under the 'Arrange' menu or 'Overlaps' from the Toolbar.



### **Reverse Welding**

objects to be welded.

Reverse Welding creates the opposite to 'common' welding. Parts of objects which overlap are removed, and those parts not overlapping remain unaltered.



Create or type the objects to be welded. They may be text or graphics and any color.

Overlaps of objects in front will be deleted from those to the back. Select all the objects.

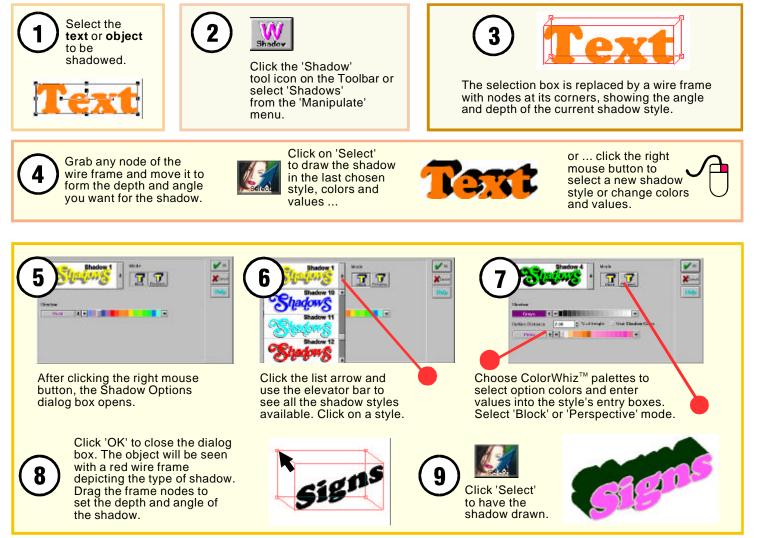




Select 'Reverse Weld' from the 'Weld' flyout menu on the 'Arrange' menu or the 'Reverse' tool icon on the Toolbar.



### Shadows Selecting Shadow Styles & Options



### **Creating Block Shadows**



Create any distortions or editing you need on the objects before commencing to create



Open the shadow options dialog box. Select 'Block' mode and 'Shadow 1' style. Choose a ColorWhiz<sup>™</sup> palette color for the shadow.



Click 'OK' to close the dialog box.

Grab any node of the box frame and drag it until the frame represents the depth and angle you need for the shadow.





Click Select to have the block shadow drawn. The Shadow will be welded together automatically.

### 2 Cut Blo

a shadow.

## Cutting Basic Block Shadows

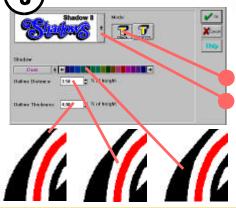
The shadow is automatically welded and is ready to cut for a vinyl overlay method.



If you wish to use a vinyl inlay method you must first use the Weld 'Punch Through' tool before cutting.



## Setting Extra Options



It is best to weld connected script before shadowing.

Click 'Block' mode

Select a shadow style such as 'Shadow 8' Select a ColorWhiz<sup>™</sup> palette color and enter values into each entry box to set the options for the shadow style.



Try smaller values first. Values below 5% are often more satisfactory.

Click 'OK' to close the dialog box.

Grab any node of the box frame and drag it until the frame represents the depth and angle you need for the shadow.

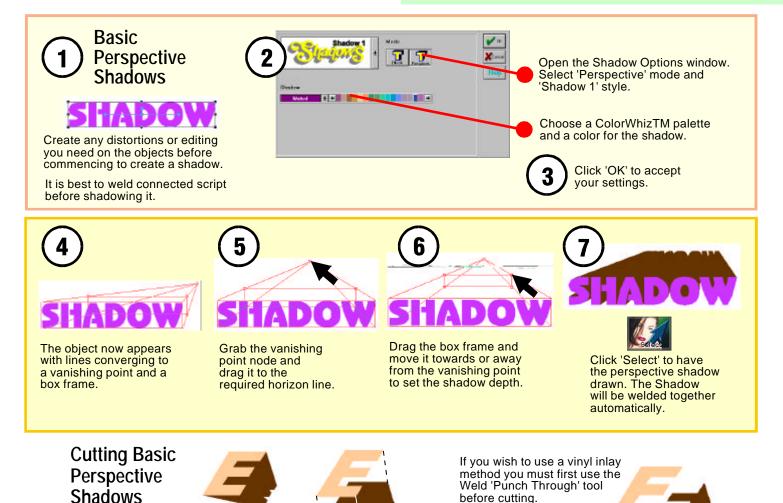




Click 'Select' to have the block shadow drawn. The shadow is welded automatically. No further welding is needed before cutting each vinyl color when an outline option is chosen.

PAGE Z2

### **Solid Perspective Shadows**



The shadow is automatically welded and is ready to cut for a vinyl overlay method.

PAGE Z3

### **Solid Perspective Shadows**

### **Curved Perspective Shadows**



Create the curve distortions before commencing to create a shadow. You can use 'Text on arc' or an arc distortion.

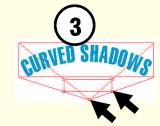
Open the Shadows dialog box.

Select 'Perspective' mode and a shadow style. You can choose 'Shadow 4' if you want to outline text. Choose a ColorWhiz<sup>™</sup> palette color for the shadow. Enter a value into any option entry boxes you want to change.

2.00 2 2

Perspect

🛎 % of height. 💉 Use Shadow Cold



Grab the vanishing point node and drag it to a horizon line below the text.

Drag the box frame and move it towards the vanishing point to set the shadow depth.





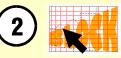


Click 'Select' to have the perspective shadow drawn.

#### **Two-Way Perspectives**



Use the 'Linear' distortion to expand the right side.



Use the 'Warp' distortion to compress the left side.



Select 'Perspective' mode and a shadow style. Choose a ColorWhiz<sup>™</sup> palette and a color for the shadow. Enter a value into any option entry boxes you want to change.

Click 'OK' to close the dialog box.



Grab the vanishing point node and drag it to the centre right of the text

Drag the box frame and move it towards the vanishing point to set the shadow depth.





Click 'Select' to have the perspective shadow drawn. The Shadow will be welded together automatically.

🗸 ок

Cance

### **Creating Drop Shadows**



Create any distortions or editing such as welding on the objects before commencing to create a shadow.



Open the shadow options dialog box. Select the basic drop shadow style, 'Shadow 10'. Choose a ColorWhiz™ palette color for the shadow (Try to keep a high contrast).



Click 'OK' to close the dialog box.

Grab any node of the separate box frame and drag it until the frame represents the drop and angle needed for the shadow.





Click 'Select' to have the shadow drawn.

Text will be converted to graphics in the process and each character will become a separate object.



Cutting Basic Drop Shadows

The shadow is a replica of the original object.

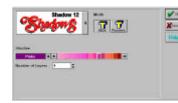


If you wish to use a vinyl inlay method, vou must first use the Weld 'Punch Through' tool before cutting.



**Setting Extra** Options

A number of drop shadow styles and options are available including inlined, line and layered effects.



Select a drop shadow style with the options you want. 'Shadow 12' has multi-lavers.

Select ColorWhiz<sup>™</sup> palette colors and enter values into each entry box to set the options for the style.

Try entering small values first to see the effect. Lines are often better when kept below 5% of object size.



Click 'OK' to close the dialog box.

Grab any node of the box frame and drag it until the frame represents the depth and angle you need for the shadow.





Click 'Select' to have the shadow drawn.

The lavers of a multilavered shadow are welded together automatically.

### **Creating Relief Shadows**

### **Relief Shadows**

The 'Relief' Shadow is designed for use over a background color to achieve the best effect.



A simple rectangle with a medium density color fill is a suitable background.



Type text, or place objects directly onto the background. Text can be typed in any color at all - choosing a high contrast color will help you see the text.

Create any distortions, welding or editing you need on the objects before creating the shadow.



Open the Shadow Options dialog box. Select 'Shadow 15'. Choose a ColorWhiz<sup>™</sup> palette and a color for the shadow (The highlighted side will be drawn in White).

Click 'OK' to close the dialog box.

Drag any node of the box frame to set the direction and size of the highlight (The shadow will form at the same size, but in the opposite direction).

Keeping the shadow size very small usually gives the best looking results.







Click 'Select' to have the shadow drawn.



#### Cutting a Relief Shadow

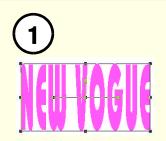
Both the shadow and highlight are automatically welded and ready to cut for vinyl overlay.



If the base material is white or a suitable light color, you can cut the highlight onto the background vinyl and weed it out.

PAGE Z6

### **Creating Cast Shadows**



Create any distortions, welding or editing you need on the objects before creating the shadow.



Open the Shadow Options dialog box. Select 'Shadow 16' style. Choose a ColorWhiz<sup>™</sup> palette and a color for the shadow.

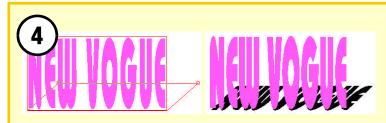
Click 'OK' to close the dialog box.



Drag a node of the wire frame to set the direction and depth of the cast shadow.



Click 'Select' to have the shadow drawn.



Dragging the wire frame to the right will form the shadow as if cast behind the objects - the 'Sunset' shadow.



Dragging the wire frame to the front and to the left will form the shadow as if cast in front of the objects - the 'Sunrise' shadow.

Cutting C st Sh dow.

The Cast shadow is a skewed replica of the objects.

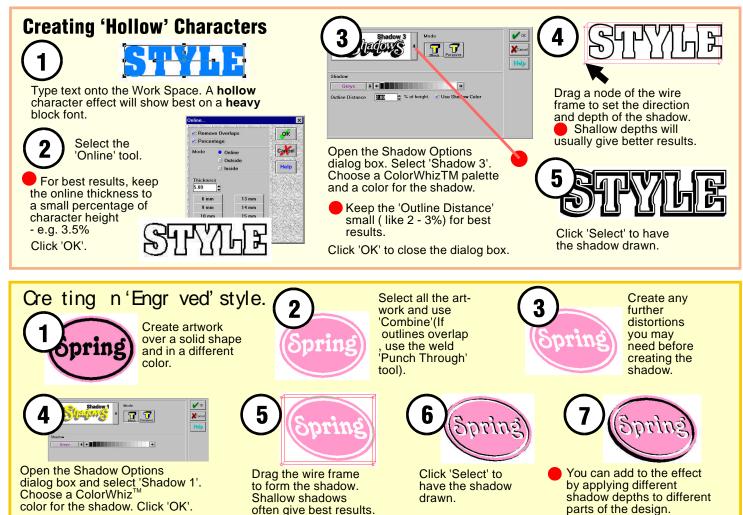


If you want to use a vinyl inlay method, you will first need to use the Welding 'Punch Through' tool.



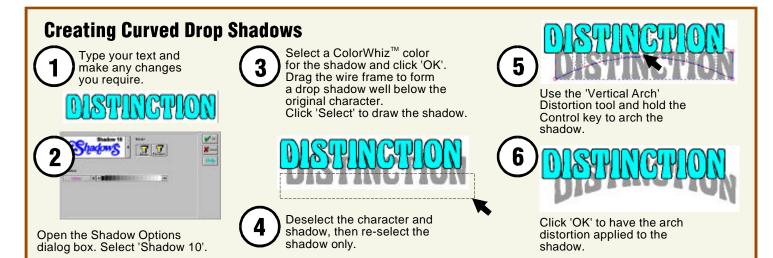
### **Creating Shadows** Adding to the Range of Styles

By combining the effects of different tools, you can create a large array of additional styles ...



PAGE Z8

### **Creating Shadows** Adding to the Range of Styles



#### Creating Double Shadows

Many interesting shadow styles can be created by applying one shadow to another.

The cast and block shadows can be combined ...



Type your text and make any changes you need.



Select 'Shadow 1' from the Shadow Options dialog box and select a color for the shadow.



Drag the wire frame to set the block shadow and click 'Select'.



Select 'Shadow 16' from the Shadow Options dialog box, and choose a different color for the cast shadow.



Drag the wire frame to set the direction and length of the shadow.



Click 'Select' to add the cast shadow.



PAGE Z9

### **Node Edit** Introduction

#### Introduction . . .

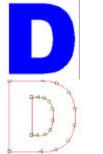
Everything you can cut in vinyl - text, circles, borders, panels - are made from one or more independent shapes called **Polygons**.

Each of these shapes is defined by its outline (It is the outline that is cut).

Outlines, in turn, are made of line segments called Vectors. Vectors can be straight or curved, of any length and be drawn in any direction. When joined together, vectors form a Path.

The shape, length and direction of a vector is controlled by small 'shapes' on the vector, called Nodes.

By node editing (moving and changing the kind of nodes controlling vectors), you can change the outline shape of objects.



Two vector paths forming the two polygons of a letter 'D'.



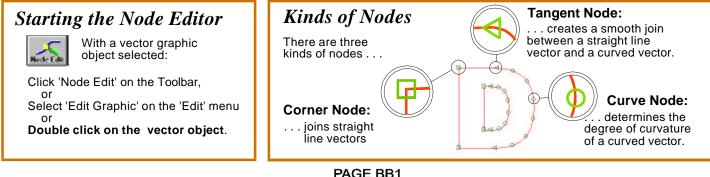
### Before You Start . . .

Graphics resulting from scanning are composed of 'Pixels' (rows of black or white dots), and have no outline. Before these 'Bitmaps' can be node edited, they must first be 'Vectorised'.

Text which you have typed onto the Work Space is stored and handled by the program in a format which you can edit as 'text'.

Before text can be node edited, it must be changed into the same format as other vectorised graphics objects.

Click on the 'Text-Grap(hics)' tool icon on the Toolbar, or select 'Convert to Curves' from the 'Arrange' menu.



### **Node Edit** The Node Editing Toolbox

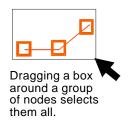
#### **Selecting Nodes:**

There are several ways to select nodes. Unselected nodes appear in green. As nodes are selected they change to orange.





Holding 'Shift' and clicking on additional nodes selects them.



#### **Opening The Node Editor** Toolbox:

After starting the Node Editor, click the right mouse button in the Work Space area to open the Toolbox.

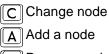
With the required nodes selected. click an editing tool.



#### Using Keyboard Key Shortcuts . . .

Many editing tools can be selected by simply pressing a key on the keyboard. Affected nodes may be already selected, or the mouse pointer can be in place over a single node.

#### Shortcut Summary:



R Remove node

Line up nodes

B Join nodes S Sharpen **Right Angle** 

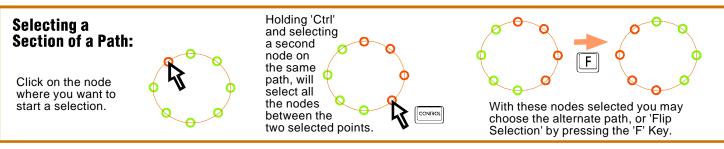
Break path U

]	Flip Selection
1	Copy Length

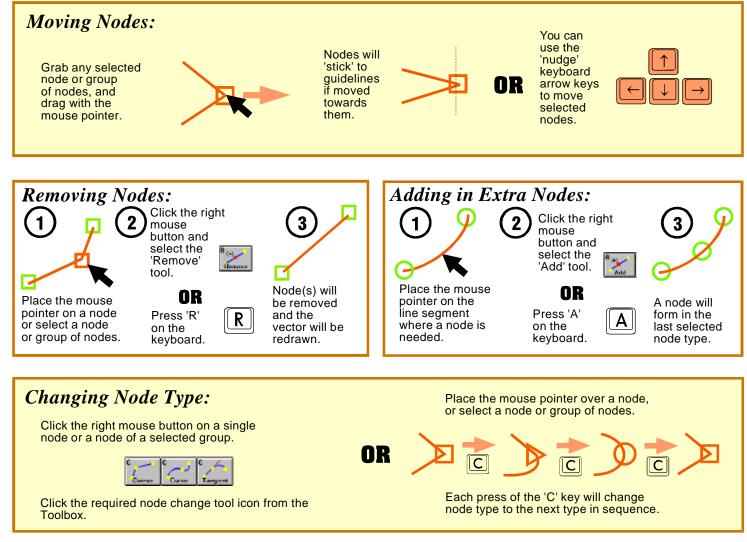
Apply Length

Copy Angle Q

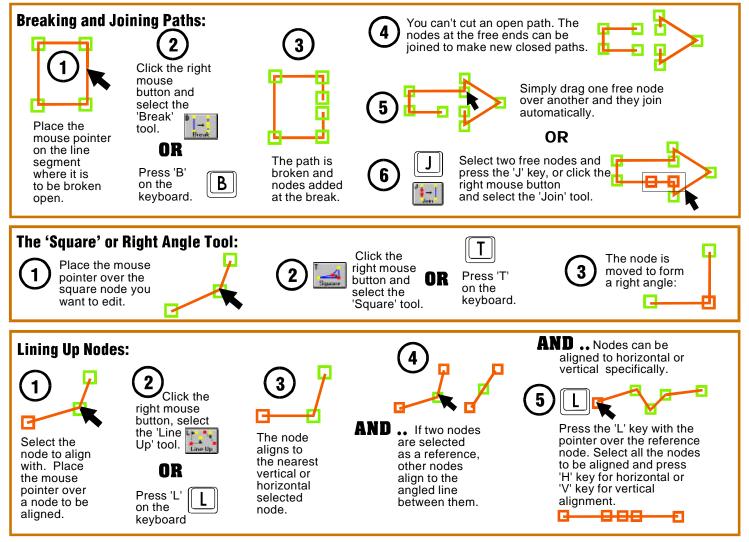
Apply Angle



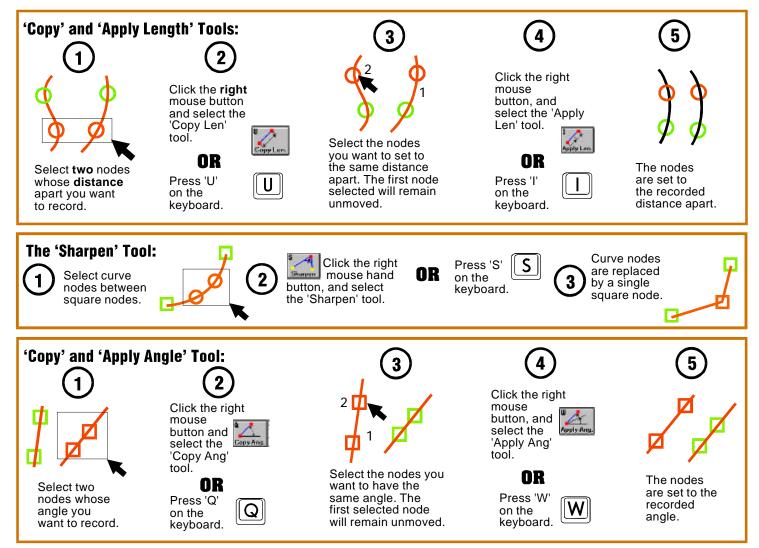
### **Node Edit** Using Node Editing Tools - 1



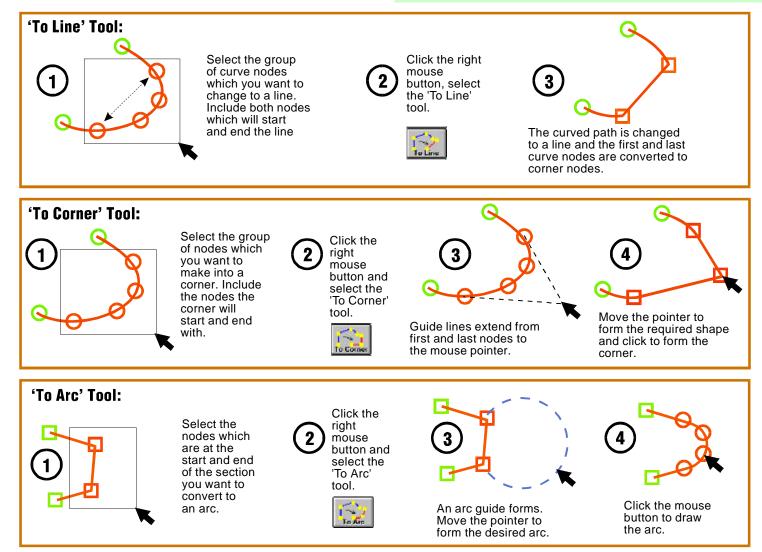
### **Node Edit** Using Node Editing Tools - 2



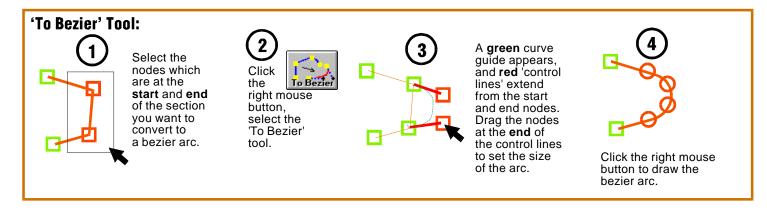
### **Node Edit** Using Node Editing Tools - 3



### **Node Edit** Using Node Editing Tools - 4

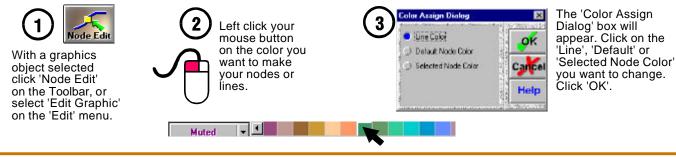


### **Node Edit** Using Node Editing Tools - 5



#### **Changing Node Colors**

Sometimes it is necessary to change the color of nodes or lines to a more contrasting color for easier editing.



#### **Correcting Mistakes**

You can undo any change or sequence of changes you have made in 'Node Edit' just the same as you can for any other program operation. Simply press 'Undo' from the 'Edit' menu or select the 'Undo' tool on the Toolbar.



You can also 'Undo' the 'Undo' operation by selecting 'Redo' just click the 'Redo' tool on the Toolbar or select the current Undo option on the 'Edit' menu.



Select the node

measure from.

you want to

### **Node Edit** Using Node Editing Tools - 6

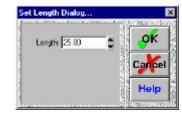
#### **'Set Length' Tool:**

The 'Set Length' tool allows you to choose how far to set one or more nodes from another.

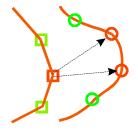
Keeping this node selected select the node or nodes whose distance from the reference node you want to set. (Use the 'SHIFT' key to select all the nodes)



Click the Right Mouse button to open the Node Edit toolbox. Select the 'Set Len' tool.



Enter a distance into the 'Set Length' dialog box and click OK. The selected node or nodes will be moved to the set distance keeping their original angles.

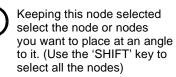


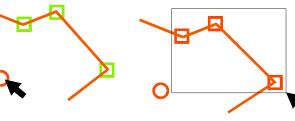
#### **'Set Angle' Tool:**

The 'Set Angle' tool allows you to place selected node or nodes at a precise angle relative to another node.



Select the node you want to use as the reference.



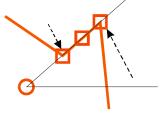




Click the Right Mouse button to open the Node Edit toolbox. Select the 'Set Ang' tool.



Enter an angle into the 'Set Angle' dialog box and click OK. The selected node or nodes will be moved to the set angle keeping their original distances.



### Learning Guide Schedule

### **Cutting Your Work in Vinyl**

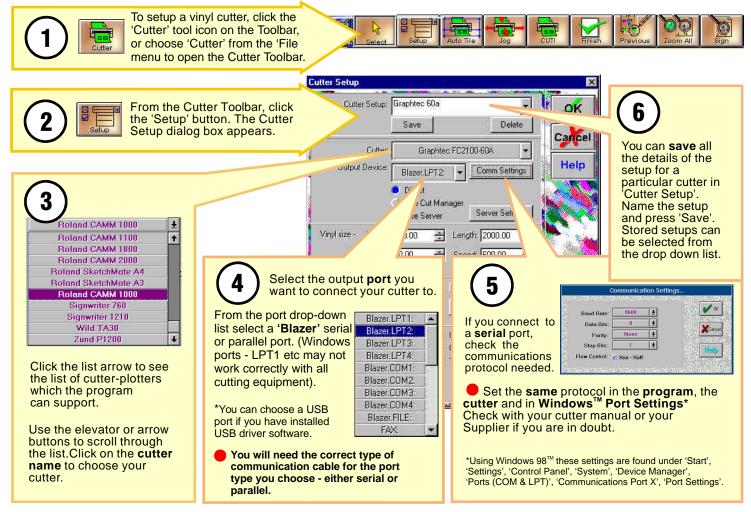
AA11	First Time Setup
AA2	Setting Up the Cutter - 1
AA3	Setting Up the Cutter - 2
AA4	Cutter Toolbar and Screen
AA5	Vinyl Cutting Options - 1 (Saving Space)
AA6	Vinyl Cutting Options - 2 (Weeding, Multiple Copies)
AA7	Vinyl Cutting Options - 3 (Registration Marks, Orientation)
AA8	Sending Data to Your Cutter
AA9	Using VinylSaver <sup>™</sup>
AA10	Cutting Large Signs - Tiling Options
AA11	Using the Cut Manager
AA12	Cutting Prints - 1
	<ul> <li>Creating a Cut Mask Around a Bitmap</li> </ul>
AA13	Cutting Prints - 2
	- Creating a 'Cut Mask' Around Vector and Bitmap Objects
AA14	Cutting Prints - 3
	- Creating a 'Cut Mask' from a 'Bitmap Mask'
AA15	Cutting Across a Network
	- Setting Up a Server or Target Computer

AA16 - Client or Host Computer Setup

# HOUR 6

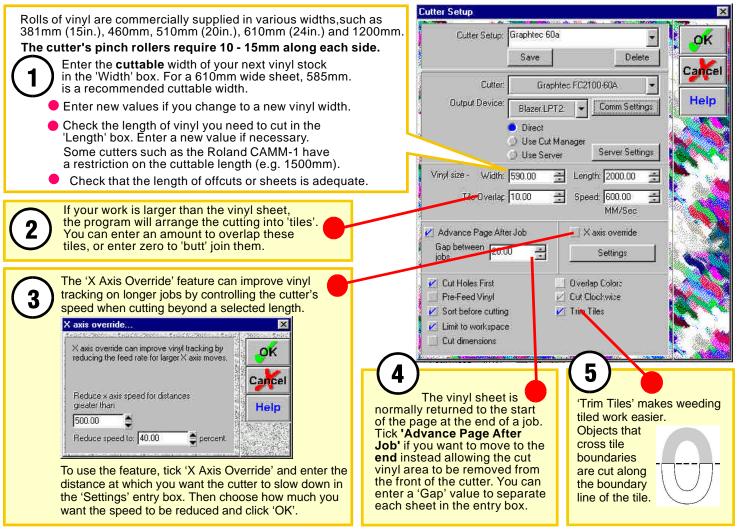
### Cutting Your Work in Vinyl First-time Setup

Before you cut your work you will need to choose the type of **equipment** you are going to use, and setup the program to communicate with it.



### Cutting Your Work in Vinyl Setting Up The Cutter - 1

Before starting to cut your work, there are a few setup options you may need to choose or change.



### **Cutting Your Work in Vinyl** Setting Up The Cutter - 2

continued...

Cutter Setup Tick the 'Pre-Feed Vinyl' feature if Cutter Setup: Graphtec 60a you want the length of vinyl needed for the current job to be fed slowly Save Delete off the roll before cutting. Cance Cutter: Graphtec FC2100-60A Pre-feeding the vinyl insures that the length of vinyl required is both Help **Output Device** Comm Settings Blazer.LPT2: available and that the pinch rollers will not slip when trying to feed vinyl Direct off a roll at full cutting speed. Use Cut Manager Server Settings Use Server Vinyl size - Width: 590.00 100 Length: 2000.00 Speed 600.00 Tile Overlag 10.00 -The time taken to cut a job is proportional to the distance the cutting head has to MM/Sec travel. Selecting the 'Sort Before Cutting' X axis override Advance Page After Job option allows the program to sort cutting Gap between 20.00 . paths so as to reduce head movement to Settings iobs an optimum for the layout. Objects will cut with general overall travel from left to right Cut Holes First. Diverlap Colorc of the vinvl sheet. Pre-Feed Vinul Cut Clockwise Sort before cutting Trim Tiles Limit to workspace 8 It is general practice to use the Work Cut dimensions Space to arrange all the elements of the sign within a border representing the sign size whilst using the areas 10) outside the Work Space as a 'scratch Once the outside of a small 391 object is cut, cutting an pad'. object enclosed within it may All the objects on your screen can be Dimensions created with the 'Draw included for cutting irrespective of the cause the vinyl of the outer Dimensions' tool do not normally Work Space border if you wish to. object to be dislodged. appear on the cutting screen. You can You can avoid such cutting Leave the option not selected to have them output to your plotter (or mishaps when cutting small include all screen objects. cutter equipped with drawing pen) by Select the option to choose only Work objects by ticking the 'Cut ticking 'Cut Dimensions' option. Space objects for cutting. Holes First' option.

### Cutting Your Work in Vinyl The Cutter Screen



Once you have finished creating your artwork in the Work Space, click the 'Cutter' tool on the toolbar or select 'Cutter' from the 'File' menu to open the cutting screen and Cutter menu.

Your artwork will be color separated and a selected color object will be displayed inside a blue cutting tile ready for sending to your cutter.

You may choose any color as the first to be cut - just click the color on the color listing and load the same colored vinyl into your cutter.

The 'sign' border now represents the **vinyl** in your cutter and will be sized to the dimensions you have last entered into your cutter's setup. Click 'Setup' and enter new dimensions if necessary.

 Piece Hold

 Piece Hold

Your cutter (represented by the dotted rectangle) will feed vinyl to the left and the object inside the blue tile will cut in the location depicted on the representation of the vinyl sheet.

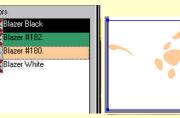
### **Selecting Colors to Cut**

You can choose to cut more than one color on the one vinyl tile. You may, for instance, wish to use the background medium's color as one of the colors in your artwork and weed it out from its surroundings.

Hold the 'Cntl' key to add colors to be cut.



General Save space



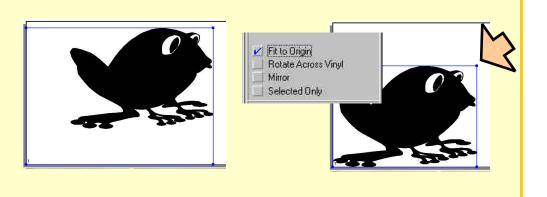
You may choose colors in any order that suits you. Click the color you next want to cut.

### Cutting Your Work in Vinyl Cutting Options - 1

### **Fit to Origin**

One of the larger expenses for the computerised sign-shop is that of vinyl cutting film. Placing your work for cutting where the least vinyl is used, is a simple economical measure you can take.

Selecting the 'Fit to Origin' option from the left panel moves the cuttable objects to the bottom left corner of the vinyl sheet.



### **Using Space Save Options**

Where it is convenient to reduce a larger sign block to individual elements, vinyl space can be saved by using the 'Space Save' options.



Space between lines of text can be reduced where it is convenient to install individual lines.



Select the 'Save Space' options tab.

Choose 'Split text into lines' and select 'Save space vertically' to reclaim wasted vinyl between text lines.



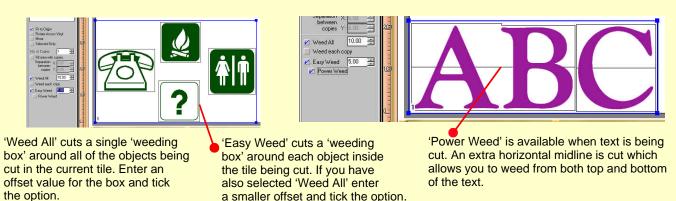
Where lettering is large or objects are spread out, further space can be saved by converting text to graphics objects and selecting 'Save space horizontally'. The original relationships will need to be restored with the sign installation.

### Cutting Your Work in Vinyl Cutting Options - 2

# Learning Guide

### **Weeding Options**

Once the objects forming your sign have been cut, you need to remove the waste vinyl from around each object. This operation is termed 'weeding'. There are a number of weeding options you can choose to make the process easier.

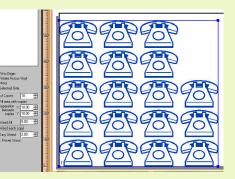


### **Making Multiple Copies**

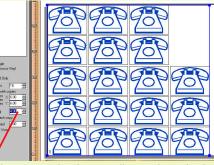


To make many repeat copies of a single object on the Work Space, enter the number of repeats required into the 'No. Of Copies' entry box in the left option panel.

You can cut the maximum number for the available vinyl area by ticking 'Fill area with copies'. Enter a value to separate each copy both vertically and horizontally.



Copies are arrayed into the available vinyl sheet width with the same separation between each one.



You can make the weeding task easier by selecting the 'Weed Each Copy' option. Select an offset value for the weed box around each copy.

### Cutting Your Work in Vinyl Cutting Options - 3

### **Rotate Across Vinyl**

Sometimes you can save vinyl by cutting appropriately sized graphics across the width of the vinyl sheet rather than along its length. Select 'Rotate Across Vinyl' from the left option panel.

The graphic on the cutting screen will change its orientation but the Work Space layout will remain unaffected.

### **Selected Only**

Perhaps you need to recut only some objects from a particular sign. Cutting a selection of graphics can be achieved by first selecting the objects on the Work space and then choosing the 'Selected Only' option from the left option panel in the cutting window. Only the selected objects appear in the cutting tile.

### **Cutting Registration Marks**

Draw at least three registration marks around the graphic (but not on it). You can choose any color you like. The same marks will be cut automatically with each color tile.

Overlay the marks exactly as you assemble your sign.





### Mirror

Installing graphics onto the inside of glass windows or doors or transparent panels requires that the graphic be cut as a 'mirror image'. You need not mirror the art work on the Work Space to cut the mirror image. Select the 'Mirror' option from the left option panel. The Work Space will be unaffected.







Assembly of a multi-colored sign can be made much easier if each color includes registration marks which are cut with each color. To cut registration marks, select 'Registration Mark' from the 'Draw' menu and select a style and suitable size.



### Cutting Your Work in Vinyl Sending Your Work to the Cutter

Once you have:

- Completed your artwork on the Work Space
- Selected 'Cutter' from the toolbar or the 'File' menu to open the cutting window
- Changed values in 'Setup', such as vinyl dimensions, if required
- Selected the color to be cut first
- / :
  - Selected 'Space Save' options
  - Selected 'weeding' and reorientation options from the left option panel
  - Loaded the selected color and size of vinyl into the cutter and made it 'Ready'

You are ready to send a cutting tile to your cutter.

2	Cut Tile Next Tile to Cut Tile Size: 590.32 x	
	Cut Tile Skip Tile	
	Move Cutter to:	ome Position faximum Pos
$\bigcirc$	Jog / Adjust E	higin

Select 'CUT!' from the cutter toolbar

#### The 'Cut Tile' window opens

Before sending data to the cutter, you can use the '**Move Cutter to:**' option to check that you have sufficient vinyl length loaded in your cutter to complete cutting the tile and that the tile will fit within the vinyl sheet. You can also test the 'tracking' of vinyl loaded in the cutter.

To check the amount of vinyl and tracking, click the '**Maximum Pos.**' Button to send the cutting head to the top right hand corner of the cutting tile. Use the '**Home Position**' button to return the head to the origin. Make any tracking changes needed before preceding.

Once tracking and area are confirmed, click the '**Cut Tile**' button. Data is sent to the cutter and a progress bar will show each buffer load being transmitted.

Once all tiles have been cut, select 'Finish' from the cutting menu to return to the Work Space.

### Cutting a Sign Using VinylSaver™

CUT

One of the larger expenses for the computerised sign-shop is that of vinyl cutting film.

Many Signwriters save partly used vinyl sheets in order to use smaller unused areas later.

VinylSaver<sup>™</sup> makes it easier to access unused areas of a vinyl sheet, and makes your vinyl operation more profitable.





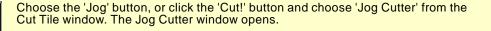
Click the 'Cutter' tool icon on the Toolbar or choose 'Cutter' from the 'File' menu. The Cutter Toolbar opens.

Choose the 'Tile' button. You may now drag



2

a box around an object on the Work Space. Click to finish forming the box. A blue cutting tile forms around the object and its size appears in the activity windows.

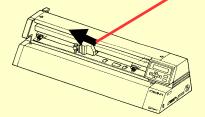




Use the arrow buttons to move the cutting head to the bottom left corner of the unused vinyl area.

The central  $\bigcirc$  button moves the cutter head back to its origin.

You may also enter the vertical and horizontal distances into the 'X/Y' boxes.



Jog Cutter.. Cutter Position Move Cutter From Origin To: Click on the 'Set Origin' X: 0.00 Tile Hume button. The bottom left Y: 0.00 Til maximum  $\oplus$ corner of the tile Set Origin Clear Ori is now aligned with the unused area of vinvl. Close He



Test the tile size on the vinyl by pressing the 'Tile Maximum' and 'Tile Home' buttons. The cutter head moves over the tile size on the unused area on the vinyl.

Color

Setup



Choose 'Close' from the 'Jog Cutter' dialog box. Click on the 'Cut!' button and choose 'Cut Tile' from the 'Cut Tile' window. The object will now be cut.

Finish

Click on the 'Finish' button to exit the Cutter Toolbar.

### Cutting Your Work in Vinyl Cutting a Large Sign

Signs can be much larger than the dimensions of the vinyl media you are using. Large signs need to be cut in sections or 'tiles' with each tile being fitted together to assemble the final sign.



Prepare your artwork at the full size you want to install it.



Click 'Cutter' on the Toolbar or select 'Cutter' from the 'File' menu

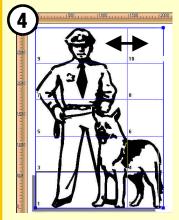
Select 'Setup' if you need to change your tile overlap settings or 'Trim Tiles' option. (Remember that vinyls shrink by varying amounts. Overlap tiles by sufficient to account for shrinkage).



Your large sign will be automatically tiled to the largest tile size your vinyl current dimensions will allow including any overlap value

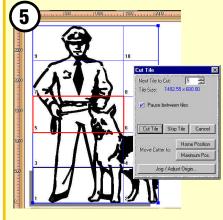
Each tile has a blue border and is sequentially numbered.





Tiles may not be automatically drawn at the most convenient places for cutting. You can drag any tile edge to best suit the job.

Try to avoid small tiles and try to reduce overlaps. Assembly of the sign will be easier and neater. Try to make **empty tiles** as large as possible to reduce vinyl usage.





Once all tiles have been cut select '**Finish**' from the cutting menu to return to the Work Space. Choose 'Cut!' from the cutter toolbar. The 'Cut Tile' window will open.

Tiles will appear in sequential order but you can cut tiles in any order you wish by entering the tile number into the 'Next Tile to Cut' entry box. Selected tiles will have a red border.

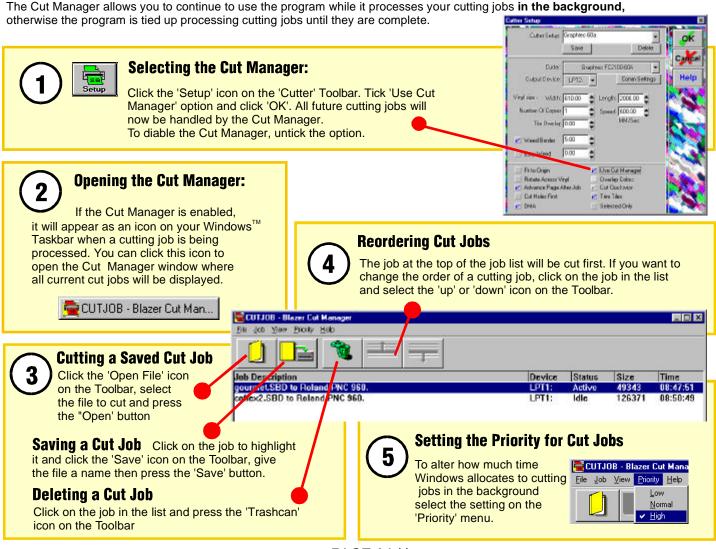
Set '**Pause between tiles**' to check tracking for each tile using the 'Move Cutter to:' option.

Choose '**Skip Tile**' to pass over any empty tiles Click '**Cut Tile**' to send tile data to your cutter.



You can restore the original automatic tiling at any time by selecting 'Auto Tile' from the cutting menu.

### **Cutting a Sign** Using The Cut Manager



Print

Cutte

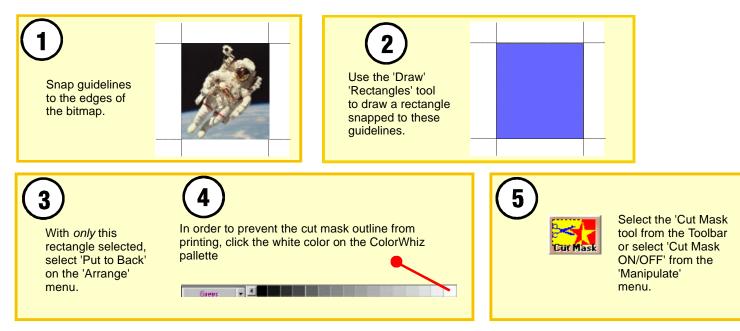
### **Cutting Prints - 1**

You can cut an outline around work you have printed. The method you use to do this depends on the kind of hardware you are using. In all cases, you must **create a 'Cut Mask'** before you can cut work that you have printed.

If you have a printer with an inbuilt cutter you should follow the steps for using a 'Cut Mask'.

If you have a separate printer and cutter you should follow the steps for 'Cut a Print' to get correct registration of printed work in your cutter.

### **Creating a 'Cut Mask' Around a Bitmap**



### **Cutting Prints - 2**

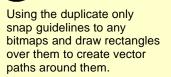


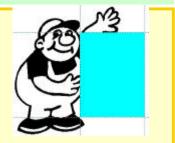
Place guidelines around the work. to assist relocating the finished mask.

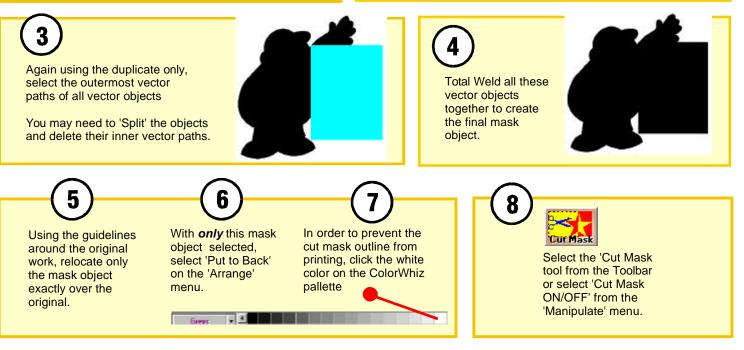
**Duplicate** all the objects together.



# Creating a 'Cut Mask' Around Vector and Bitmap Objects

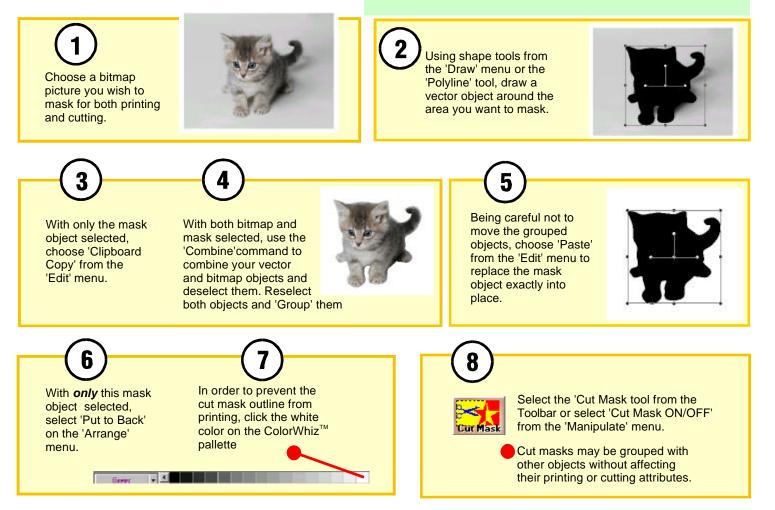






#### **Cutting Prints - 3**

#### Creating a 'Cut Mask' From a 'Bitmap Mask'



#### **Cutting Across a Network**

#### Setting up a Server or Target Computer

Computers can be networked together in various configurations such as 'Peer to Peer' or 'Client - Server'. You can have vinyl cutters, printers and other peripherals connected to computers which share the network and access them from a 'Client' or 'Host' workstation on the same network.

In order to send cutting file information to a specific network cutter (the Target Cutter), the computer it is connected to (the Server or Target Computer) needs to be setup.



To setup a Server or Target computer you need to run the SignBlazer5 Installation CD on this computer and select the Network Server option.

After installation, the Target Computer will have:

- a folder called '\SignBlazer5\Cut manager\Input'
- a copy of the program "Cutman32.exe" installed
- a shortcut icon for "Cutman32" on the desktop

The Target computer does not need a Software Protection Device (or dongle) installed.



If the Target Computer is running Windows95/98 operating system, ensure that **file sharing** is enabled:

In 'Control Panel', open 'Network'. Click 'Configuration' tab and select 'File and Print Sharing ...' and then tick the option: 'I want to be able to give others access to my files'

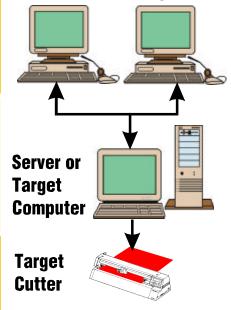


In Windows 'Explorer', locate the folder '\SignBlazer5\Cut manager \Input' and click on it using Right Mouse button. Select 'Sharing ...' In 'Properties' have the folder 'Shared as ...' "**Input**" and 'Full' 'Access type' selected. Do not enter a password. Click OK.



Note the target cutter's **make and model** and the **port** it is connected to. Open 'Control Panel', 'Network' and 'Identification' tab. Note the Target Computer's **network name**.

#### **Client or Host Computers**





Run the program 'Cutman32' by double clicking the desktop icon.

If a network cutter is used often, it may be useful to copy the 'Cutman32' shortcut into the Target Computer's Startup folder so that the Cut Manager program will run whenever that computer is started.

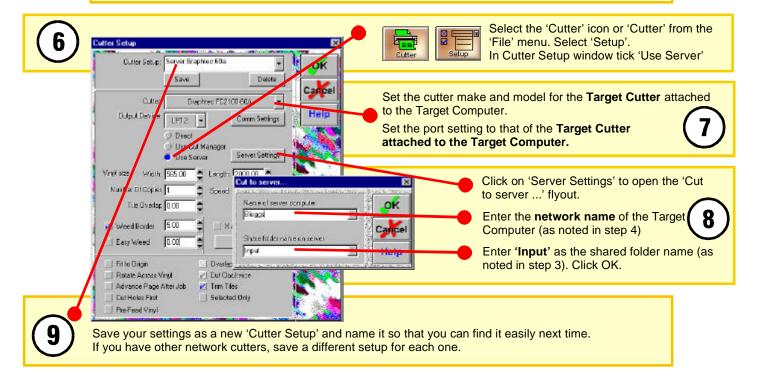
#### **Cutting Across a Network**

#### **Client or Host Computer Setup**



A 'Client' or 'Host' computer to be used for netwok cutting is a networked computer which is host to a registered running copy of SignBlazer5. Each Client or Host workstation on a network must have its own Software Protection Device (or dongle). A Client or Host computer may or may not have a vinyl cutter attached to it

For a Client or Host computer to cut across a network, it needs to be setup.



### Learning Guide Schedule

#### **Printing**

- Y1 The Printer Toolbar
- Y1 Print Registration Marks
- Y1 Selecting the Colors to Print
- Y2 Printer Selection and Setup
- Y3 Windows Printer Driver Setup
- Y4 Fitting Work to the Page
- Y5 Printing a Grid
- **Y5** Starting the Print
- Y6 Large Format Printing
- Y7 Color Management Printer Output Options

# HOUR 7

### **Printing - 1** The Printer Toolbar



Click the 'Print' tool icon on the Toolbar, or select 'Print' from the 'File' menu.



As and aid to show the **boundaries** of your print job, you can use registration marks at the edges of your work.



Click the tool icon on the Printer Toolbar to open the Registration Marks dialog box box.



### **Print Registration Marks**

To select the registration marks that will be used when printing, either click on a box (or boxes) in the corners of the square, or press the 'All' or 'None' button. Then press 'OK' to save these settings.

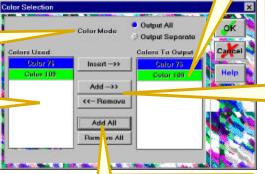
**Selecting the Colors to Print** 

If you click the 'PRINT!' tool icon on the Printing Toolbar, **all** colors in your work will be automatically used in the print job. However, if you need to print **only some** of the colors, or print the colors **separately**; you can make changes by choosing the 'Color' tool icon on the Printer toolbar. This opens the Color Selection dialog box.

To print a number of colors on the **one** sheet select 'Output All'. Alternately, to print each color on a **separate** sheet in sequence, tick the 'Output Separate' option.

'Colors Used' list shows all the colors used in your drawing. Use the buttons in the centre to **transfer** colors to the 'Colors to Output' window for **printing**.

To print in color, you need a color printer (which you have set for color printing); otherwise colors will be represented by shades of grey.



Color

You can transfer **all** the colors used to the 'Colors to Output' window by pressing the **Add All** button. You may clear the list by pressing **Remove All**.

Colors will be **printed** in the **order** that they **appear** in this window.

You may **insert** a color into the 'Colors to Output' list. First **click** the place in the list you want to insert a color. The new color will be inserted directly **above** the place you have selected. Click the 'Color Used' you want inserted. Press '**Insert** ->>'.

Clicking on a 'Color Used' and then pressing '**Add** ->>', or double clicking a color, places that color onto the bottom of the 'Colors to Output' list. Clicking a 'Color to Output' and then pressing '<- **Remove**', or double clicking on a color deletes the color from the list.



Click the 'Print' tool icon on the Toolbar, or select 'Print' from the 'File' menu. Then click the 'Setup' tool icon to open the 'Setup" dialog box.

Before you can print, you must select the printer you wish to use from the drop down list. You may select from a range of **Large Format** printers or select "Windows Printer Driver" to use a printer already installed under the Windows operating system

If you want to print arrayed copies of an item **on the same page**, enter the number of copies into the entry box and tick the layout arrangement you want. Tick "across" to build columns and "along" to build rows and enter the spacing you you want between each item into the spacing entry boxes.

Tick 'Use Tile Printing' if your work is **larger** than the page you are printing, and you want the printing to be arranged into sections called *tiles*.

#### Tile to Object Extents:

All of your work will be tiled, even if your work is larger than the page size.

#### Tile to Work Space Extents:

Only those parts of your work which fall inside the Workspace will be tiled if they are larger than the page size.

#### <u>Tile Overlap</u>

You can enter an amount to overlap tiles, or enter zero to butt join them.

Press "Printer Configure" to select options for the selected printer.

If you have selected 'Windows Printer Driver', the Windows Print Setup dialog box will appear. See **Windows Printer Driver Setup**.

But if you have selected a large format printer, the Large Format Printing dialog box will appear. See Large Format Printing.

Print Setup **Printer** OK Window Ainter Driver Cance Part (PT) Printer Conligure Number Of Copies 1 Spacing 25.000 Array copies across page Eut Mesk Array copies along page 25,000 Die Pint P Use Tile Printing Cut Color Large Tile Numbers T le to object extents. Tile to workspace extents A Y 0.000 Tile Overlag X 0.000 Right Margin 0.000 -Color Object Separation Print Color Object Separations in Black Miscelaneous: Print Dimensions items

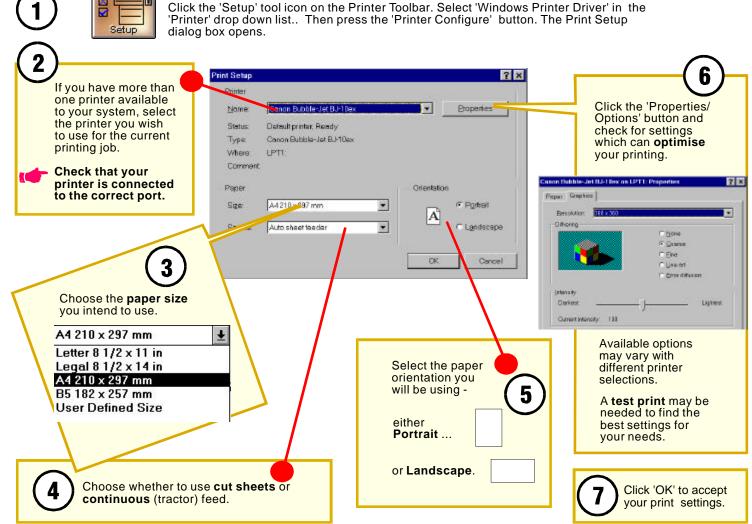
Tick the 'Color Separations' option to have items of the same screen color printed in black on separate sheets. This is useful for preparing screen printing positives. Select the output Port which the selected printer is connected to. You may select Parallel Ports LPT1 to 4 or Communications Ports COM1 to 4 provided that the port hardware is present and you use the correct communication cable type.

 To access the 'Windows Printer Driver' port setting, press the 'Printer Configure' button, and then press the 'Options' button.

You can make fine adjustment to the placement of printed work on the page by entering a value to specify the size of the Right Margin.

Tick the box to include items drawn with the 'Draw Dimensions' tool in your print.

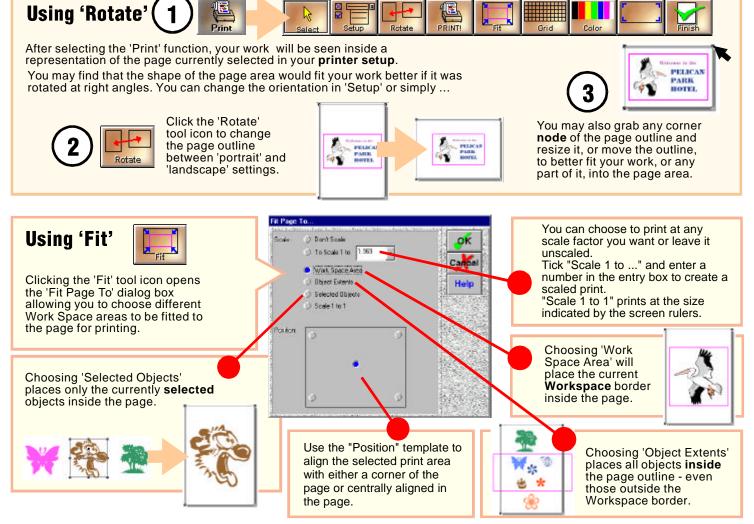
Click on the 'OK' button to save your new settings.



### Printing - 3 Windows Printer Driver Setup

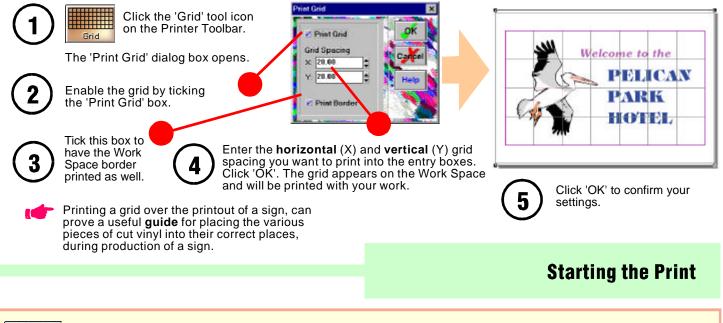
PAGE Y3

### **Printing - 4** Fitting Your Work to the Page



## Printing - 5 Printing a Grid

This program allows you to print a grid with selectable horizontal and vertical spacings onto **paper** or **clear film** with a laser printer for use with **projectors**.





Once you have completed your printer setup, simply click the 'PRINT!' tool icon on the Printer Toolbar.

The 'Printing' window opens, and shows the **printer** being used, and the **progress** of the print. To **stop** printing at any time, click the 'Cancel' button.





When you have completed printing, you can return to normal operations by clicking the 'Finish' tool icon on the Printer Toolbar.

PAGE Y5

## Printing - 6 Large Format Printing

Large Format Printing requires that bitmaps, often created from small area scanned images, are reproduced on a much larger scale. Simply changing a bitmap to a larger scale will increase the size of each pixel proportionately until individual pixels become visible and the image will look jagged and 'blocky'. Increasing the scale of a bitmap but retaining a resolution suitable for its intended viewing distance requires a 'Raster Image Processor' or 'RIP'.

To print your work using the RIP:

Select 'HotShot RIP' from the 'File' menu or press 'Cntl+P'



OR select the Large Format Printer tool on the Toolbar



Setup

Press the 'Setup' tool icon on the Printer Toolbar. Ensure that your large format printer is selected in the **'Printer'** drop down list. Press the **'Printer Configure'** button, the Large Format Printing dialog box will appear, and the 'General' page becomes visible.

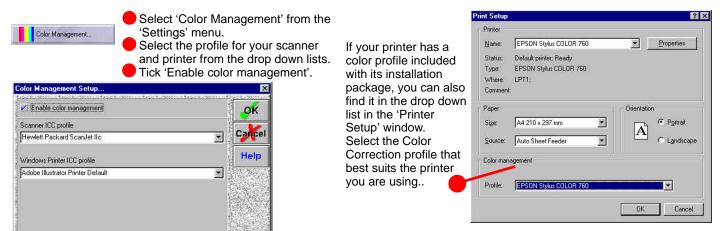
You can <b>save</b> all your settings for large format printing using this box. Once you have completed your desired settings,	Large Format Printing X General GCR Color Curves Ink
type a name into this box that identifies this group of selections. Press the 'Save' button.	Dutput Media Type Uefault Default When you first connect your large format printer, you need to set up the
To <b>use</b> a previously saved setup, click on the down arrow to the left of the box, and select an item from the list.	Save         Delete         Import         software to work correctly with it.           To calibrate for large format printing, you need a densitometer in order to         order to
To <b>delete</b> a setup, select the setup from the drop down list, then press the 'Delete' key.	Dutput Media Dimensions       obtain the readings you need to fill into the "Color Curves" worksheets - GCR - Gray Component Length. 297.00
Type a value into the 'Width' and 'Length' boxes to represent the size of the media that you are printing on.	Print Direction:       Top to Bottom         Bottom to Top       Full details for printing and using these worksheets are found in the Use File Use for four four four four four four four
	Help File "Calibration for Large Format Printing"
Click on either 'Top to Bottom' or 'Bottom to Top', to set the direction of	ICC color profile
printing on the output media.	No profile selected.

With the program running on your computer, press the F1 key or select "Search" from the "Help" menu In the Help - Search window, type "cal ... " in the top entry box and then select "calibration" from the index listing.

#### PAGE Y6

## Printing - 7 Color Management

Getting the best out of your printer and scanner can be assisted by selecting Color Correction Profiles from the Color Management system. Each piece of equipment, printer or scanner, has its own particular engineering and method of translating color and data. You can remove minor color distortions by setting an appropriate Color Correction profile for each piece of equipment.



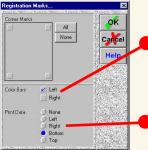
## **Printer Output Options**

## Printing Color Bars and File Data



Your proofing printouts can be enhanced to carry CMYK ink color bars down the page edge and print the document reference data.

Click the 'Regist' tool from the Printer Toolbar.



To print color reference bars along an edge, tick 'Left' or 'Right' in the 'Color Bars' option panel in the 'Registration Marks' window.

To have the file data printed, choose a page location from the 'Print Data' option panel in the 'Registration Marks' window.



## Learning Guide Schedule

## **Technical Notes:**

- i Program Installation
- ii System Requirements & Recommendations
- iii Producing Artwork in Other Programs
- iv Notes For Users of CorelDRAW! 4
- Importing Graphics Files from Macintosh and PC Programs
- vi Using Photoshop Plugins
- vii Hot Key (Shortcut) Summary



# Installing the Program





- Before commencing the installation it will help if you:
  - Know the brands of your vinyl cutter and printer and which ports they are connected to. ( If unsure you could check the settings in other programs on your system - or you can make temporary selections during installation and change them later)
  - Make sure you have sufficient free disk space to install the program files, fonts, and the clipart files (approx 200 MB)

- Page vi gives details of additional space required for 'Sample' files if you want to install them.

Insert the CD ROM from your package into your CD ROM drive tray.

The installation program will now automatically start.

- Click on the various information icons on the install program to learn important information, before continuing.

Follow the on-screen instructions. The program will now be installed onto your hard disk. (If you should experience any difficulties installing the program, please contact your Dealer)



Remove the software lock or 'dongle' from your package, being careful not to touch its plug pins (static discharge can cause them to fail). Insert it into any parallel output port on your computer, securing it in place with its screws.



The dongle is a software protection device which must be present for the program to run.

# Starting the Program



Double click the program 'shotcut icon' on your desktop or -

Click the Windows<sup>™</sup> 'Start' button and then click 'Programs' from the popup menu. Locate and open the program group on the popup listing and click the program icon.



With a copy of the program running, you can start other copies of the program.

### Notes i



## Minimum System Configuration:

486 Processor 32 MB RAM CD ROM Windows 98 Operating System

## **Optimum System Configuration:**

Pentium II Processor 64 MB RAM CD ROM Windows 98/ME/2000/NT Operating System A Modem and Internet Access is required for

accessing the Blazer Web Site and using the Program's E-Mail capabilities

## Large File Handling Requirements:

In order to successfully handle large files >100 MB as may be encountered with Large Format printing files, RAM of 128 MB up to 256 MB is recommended.

## Installation of Sample Files

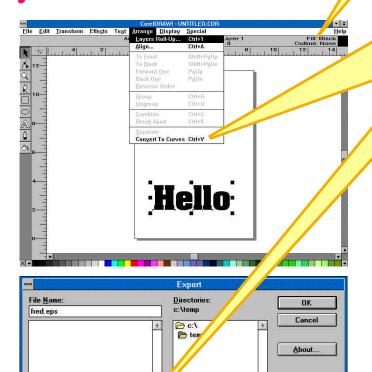
In order to improve productivity as quickly as possible, many 'sample files' are included with your installation CD. The 'Sample Files' section takes up 350MB on your CD and need not be installed or copied to your hard disk unless you want to. These files can be opened and viewed as needed directly from your installation CD disc. If you have room and wish to install these files, you must choose "Custom Installation" and tick the "Sample Files" box.



## Producing Artwork in Other Programs

If you wish to create text or graphics in a a **Computer Aided Drawing** (CAD) program such as 'CoreIDRAW!', save the file as an 'EPS' file.

There are a few important instructions to follow before saving your work to an 'EPS' file:



Drives:

E c: ms-dos 5

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List Files of Type:

Encapsulated PostScript,\*.EPS

Make sure all your work (text and graphics) has a **solid** color fill and **no** outline.

Make sure that **all text** has been changed into individual **graphics**. In CoreIDRAW! 3, use 'Convert to Curves' followed by 'Break Apart' in the 'Arrange' menu. Other CAD programs have similar commands.

Make sure to select 'Encapsulated PostScript' as the export file type.

You can give any name (like FRED or 123) to an 'EPS' file, and then use the same file over and over again. This will save you having to regularly delete many unwanted files.

'Postscript' is a computer language originally invented by Adobe Systems Inc. for sending instructions to printers.

Postscript instructions can be placed into a computer file, which usually has a name ending in '.EPS' short for 'Encapsulated PostScript'



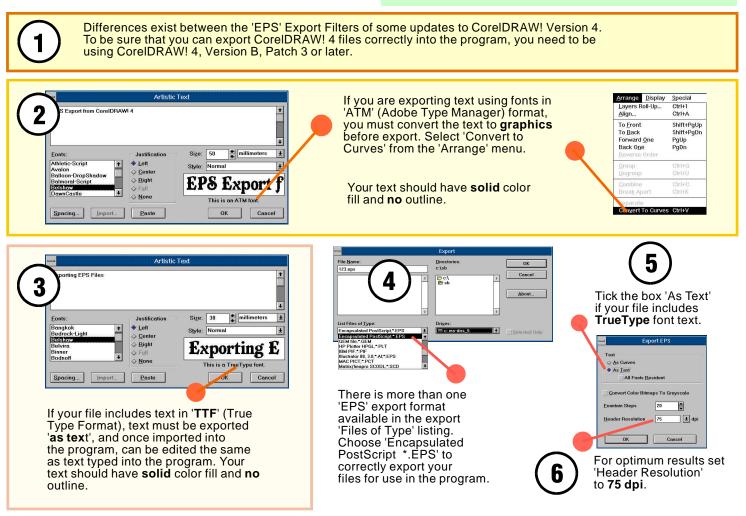
Many programs now use this 'EPS' format as a good way of exchanging graphical files. For example, artwork from a program like 'CoreIDRAW!' can be saved as an 'EPS' file, and then be imported into the program.

#### Notes iii

Selected Unly

## Producing Artwork in Other Programs

## **Notes For Users of CorelDRAW! 4**



Notes iv

# Importing Files From IBM PC and Macintosh Programs

## Importing Graphics Files from IBM PC Programs such as CorelDRAW and Adobe Illustrator and from 'Mac' programs such as Freehand and Adobe Illustrator :



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The Apple Macintosh computer saves information on disk in its own distinct format. When saving files from a 'Mac' they must be saved onto an 'IBM' formatted disk, using the 'IBM PC' option. Do NOT compress Mac files before exporting them.

Se Bitmaps can be imported directly using 'File', 'Import'. All supported file types are listed at the top of the Import window.

Successful importation of Vector Files requires holding to a few rules when exporting from the host program.

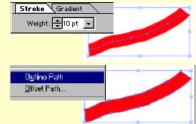
Convert all editable text to 'Curves' or 'Paths'

Separate out any bitmaps and export them using bitmap formats such as 'TIF', 'JPG' etc

Remove all 'group' structures and 'Split' or 'Break Apart' all objects into individual polygons.

Look for any object that has been 'stroked' - that is has had thickness added to vector outlines. Although 'stroking' is printable in the host program it is not exportable and will not cut or print after importing the file.

Where possible convert 'stroking' into vector paths - in Illustrator use 'Object' menu ... 'Paths' ... 'Outline Path'. If stroked objects have been exported unconverted you will need to use the 'Online' tool to recreate the line thickening.



Choose to export files as 'Adobe Illustrator' (\*.AI) format Type 3 or higher for preference. Failing this select 'EPS' format but not 'Postscript Interpreted'. Swith off any 'Binary' options.

Having Imported a file, use 'Split' before deleting any unwanted objects such as guidelines (Illustrator guides are combined with the first letter of text lines).

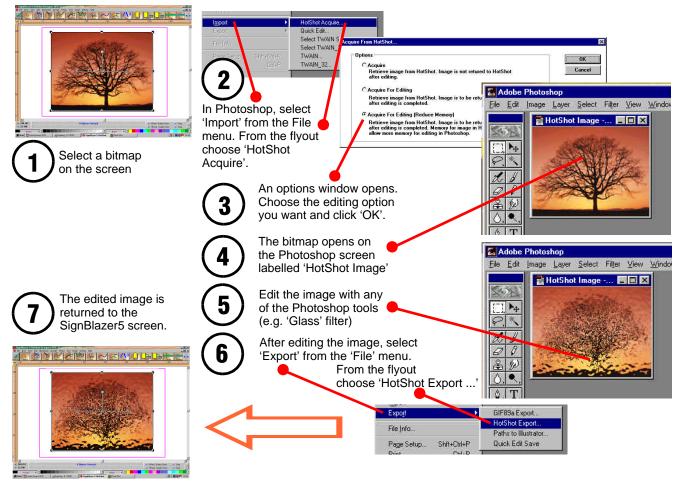
Depending on the host program, imported files may lose their color or come in layered requiring viewing in 'Wireframe' to have all components become visible. Combining appropriate components and selecting their correct color fills will restore the original file.

#### Notes v



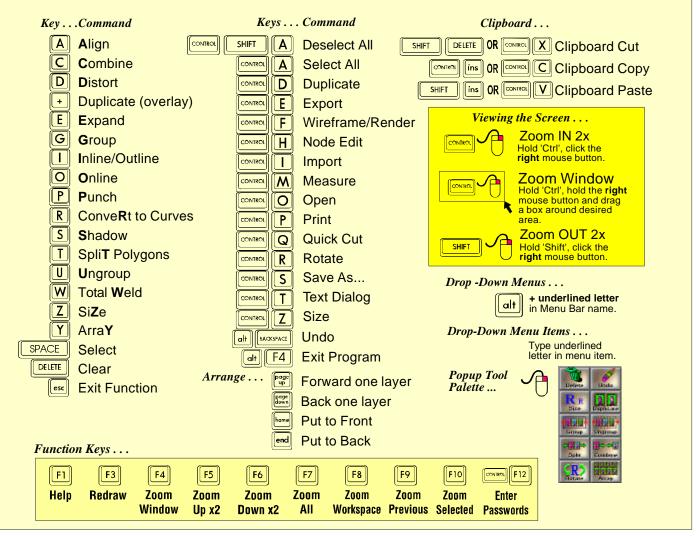
During the Installation process, your system is checked for programs which accept "plugins" and these are installed where possible. If you have a copy of Adobe Photoshop version 3.51 or later, plugins are automatically installed.

Plugins are program elements which permit direct interaction between two programs - Photoshop plugins allow bitmap graphics on the SignBlazer5 screen to be passed directly onto the Photoshop screen where all Photoshop filters and functions can be used before passing the graphic back to the SignBlazer5 screen.



Notes vi

## SignBlazer HOT KEY SUMMARY



Notes vii

0 dearees - horizontal alignment R2 1 bit (bitmap depth) O8 1 to 1 - print scaling option Y4 4 bit (bitmap depth) O8 8 bit (bitmap depth) O8 10% nudge F3 12 degrees (used for slanted / italic text) N2 24 bit (bitmap depth) O8 72 dpi Clipboard bitmap resolution F6 90 dearees - rotations (180, 270 -90) 12 H5 - vertical alignment R2 256 colors - Windows<sup>™</sup> display driver W4 3D rendered icons D1 D2 '+' Key – object duplication K1 A4 - (printer) paper size Y3 absolute (Abs) movement F3 'Add ->>' - cutter color selection option AA6 - print color selection option Y1 'Add All' - print color selection option Y1 add characters (text) N9 'Add Selected (Color) to Favorites' L4 'Add Space' (text - character spacing) N4 'Add to Dictionary' (Spell Checker) N4 adding nodes (node edit) BB3 additional text characters, typing N14 Adobe<sup>™</sup> programs files Notes v, vi Adobe Illustrator™ - copying from using Clipboard F6 - import from Notes v Adobe Photoshop<sup>™</sup> Plugins Notes vi 'Advance Page After Job' cutter option AA2 'Al' file format Notes v alignment - of Guide Lines to objects B7 - of nodes (node edit) BB4 - of objects using arid F2 - of objects to Guide Lines B7

- of text N1

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Windows™ - Clipboard F5 - control buttons B1 - Explorer<sup>™</sup> C7 - minimize/maximize buttons B1 - Printer Driver - setup Y2 Y3 - Windows START button Note i Windows<sup>™</sup> 98/ME/2000/NT - 32bit file naming convention C3 - setup recommendations Notes ii Windows<sup>™</sup> Internet Explorer A3 Windows<sup>™</sup> Taskbar AA11 wireframe - background viewing mode B8 - outline guides F1 F2 H1-H3 I1 I3 I4 K1 L3 U1-U12 W7 - screen viewing mode B8 E3 H8 X1 X3 - 'Shadows' tool guides Z1 - Z9 'Work Space' - border A2 B1 B4 Y4 AA10 - cleared at start A1 C1 - customising B2 - cutting objects in AA4 AA10 - moving around in B3 - printing border Y5 - setting up A2 - size A1. A2 - Setup, 'File' menu A2 - typing directly into N1 - viewing B4 World Wide Web – Blazer Site A3 'www.blazer.com.au' A3 Х - axis override feature AA2 - capital X height of font N2 - co-ordinate of circle's centre J3 - 'Grid Spacing' (print) Y5 - horizontal screen location B1 B3 - 'Jog Cutter' movement AA9 - movement pointer F1 - Move X - Horizontal F3

- Origin co-ordinate entry box B3 - Size X - Horizontal H2 - vertical grid lines B3 - Y/X ratio of ellipse J5 - co-ordinate of circle's centre J3 - 'Grid Spacing' (print) Y5 - horizontal grid lines B3 - 'Jog Cutter' movement AA9 - Move Y - Vertical F3 - Origin co-ordinate entry box B3 - Size Y - Vertical H2 - vertical screen location B1 B3 - Y/X ratio of ellipse J5 - (cutter jogging origin AA9) - default screen location B3 - relocating B3 - offset, 'Expand' option V1 V6 - Origin Dialog box (screen) B3 zoom - All B4 - Extents B4 - height B5 - in X2 B5 - out X2 B5 - Previous B4 - Selected B4 - using mouse drag B5 - width B5 - Window B4 R2 - Work Space B4