

EXPRESS Glossary

Click on the keypad or use the scroll bar

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

A

[Activity Manager](#)

[Apply](#)

[Application](#)

[Accelerator Keys](#)

[Aspect \(Condense/Extend Value\)](#)

[Attributes](#)

B

[Bezier Curve](#)

[Bitmap Images](#)

[Bounding Box](#)

C

[Cancel](#)

[CGM File Format](#)

[Chart Types](#)

[Click](#)

[Clip-Art Collections](#)

[Clip-Art Manager](#)

[Clipboard](#)

[Clipboard Formats](#)

[Clipping Mask](#)

[Closed Shape](#)

[CMYK Color Model](#)

[Color Palettes](#)

[Color Separations](#)

[Command](#)

[Command Button](#)

[Complex Curve](#)

[Content Menu Button](#)

[Control Handles](#)

[Control Menu](#)

[Control Points](#)

[Corner Join](#)

[Crop Marks](#)

[Current Page](#)

[Cursor](#)

[Curve Segment](#)

Custom Collection

D

Decipher

Default

DEF File Format

Dialog Box

DIF Files

Dither

Document Precision

Drag and Drop

Dragging the Cursor

E

Enter

EPS File Format

Erase/Delete

Even/Odd Fill

Exit

Eyedropper

F

Files

Fill

Fill Styles

Fixed Disk

Flexible Diskette

Flip Horizontal (<>)

Flip Vertical (V/\)

Flyout

Four-color Printing

Freeform Object

Freeform points

Frequency

G

GED File Format

Gradient Fills

Graphic Attributes

Group

H

Hairlines

Halftone

Handles

Hint Line

Hues Color Model

I

Icon

Imagesetter

Importing

Italics

J

Justified

K

Kerning

L

Leading

Line Pattern

Line Width

M

Margins

Marks

Menu

Metafile

N

New

Non-Proportional (Sizing)

O

Object

Object handles

OLE

On-screen Help

Open Shape

P

Page Orientation

Page Size

PIC

Pica

PostScript

Printer Fonts

Process Color Separations

Pushpins

R

Raster Patterns

[RGB Color Model](#)

[Rollup Menu](#)

S

[SCODL](#)

[Screen Angle](#)

[Screen Frequency](#)

[Scroll Bar](#)

[Selecting Objects Using Shift+Click](#)

[Separation](#)

[Separation Labels](#)

[Service Bureau](#)

[Special Text Characters](#)

[Spot Color Separations](#)

[Stacking Order](#)

[Styles](#)

[Style Buttons/Bar](#)

[SYLK Files](#)

T

[Text Attributes](#)

[Text Baseline](#)

[Text on a Shape](#)

[Thumbnails](#)

[TIF](#)

[Toggle](#)

[Tracing Accuracy](#)

[Tracing Color](#)

[Trapping](#)

[Troubleshooting](#)

[Type Spacing](#)

[Type Styles](#)

U

[Undo](#)

[UnGroup](#)

[Unit of Measure](#)

V

[Vector Drawing](#)

[Viewing Options](#)

W

[Wildcard Characters](#)

[Windows Clipboard](#)

[WMF File Format](#)

[Word Alignment](#)

[Word Attributes](#)

[Word Baseline](#)

[Words](#)

Z

[Zoom](#)

EXPRESS Commands

Click on the keypad or use the scroll bar.

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

A

[About](#)

[Accelerator Keys](#)

[Accel-O-Draw](#)

[Activity Manager](#)

[Actual Size](#)

[Add Handle](#)

[Align](#)

[Align Points Horizontally](#)

[Align Points Vertically](#)

[All Pages](#)

[Arrange Objects](#)

B

[Better Gradients](#)

[Bind to Shape](#)

[Blend](#)

[Block Select](#)

[Break Apart](#)

[Bring to Front](#)

[Browser](#)

C

[Chart](#)

[Clear](#)

[Clip Art Manager](#)

[Clipboard](#)

[Color](#)

[Color Filters](#)

[Copy](#)

[Current Page](#)

[Curve](#)

[Custom Symbol](#)

[Cut](#)

[Cvt Line <> Curve](#)

[Cvt to Freeform](#)

D

[Deselect All](#)

[Drawing Options](#)

[Draw Curve](#)

[Draw Line](#)

[Duplicate](#)

E

[Edit Freeform](#)

[Effects](#)

[Exit](#)

[Export](#)

[Extrude](#)

F

[Faster Gradients](#)

[Fill](#)

[Flip Horizontally](#)

[Flip Vertically](#)

[Freeform Text Editing](#)

[Full Screen](#)

G

[Group](#)

H

[Help for Help](#)

[Help for Items](#)

[Help Table of Contents](#)

I

[Import](#)

J

[Join Open Shapes](#)

L

[Line](#)

[Line Styles](#)

[Lock/Hide/Name](#)

M

[Maintain Curve Slope](#)

[Maintain Smooth Joins](#)

[Make Horiz/Vert](#)

[Make Join Smooth](#)

[Make Proportional](#)

[Merge](#)

N

[New Document](#)

O

[Object Cache \(Clear\)](#)

[Object Cache \(On/Off\)](#)

[Open](#)

[Outlines Only](#)

P

[Page Setup](#)

[Paste](#)

[Paste Behind](#)

[Paste in Front](#)

[Previous View](#)

[Print](#)

[Printer Setup](#)

Q

[Quick Display Bitmaps](#)

[Quick Display Bitmap Smoothing](#)

[Quick Display Fills](#)

[Quick Display Wide Lines](#)

R

[Recall Styles](#)

[Recall Values \(Angle\)](#)

[Recall Values \(Length\)](#)

[Recall Values \(Perpendicular\)](#)

[Recall Values \(X\)](#)

[Recall Values \(Y\)](#)

[Recall View](#)

[Redisplay View](#)

S

[Save](#)

[Save As](#)

[Save Styles](#)

[Save Values \(Angle\)](#)

[Save Values \(Length\)](#)

[Save Values \(X\)](#)

[Save Values \(Y\)](#)

[Save View](#)

[Select All](#)

[Send to Back](#)

[Set Start/End Point](#)

[Shape Info](#)

[Show/Hide Control Points](#)

[Show/Hide Freeform Points](#)

[Show/Hide Gradients](#)

[Snap Options](#)

[Snap to Grid](#)

[Snap to Line/Curve](#)

[Snap to Points](#)

[Special Text Characters](#)

[Specify Values](#)

[Split](#)

[Styles](#)

[Symbol](#)

T

[Text](#)

[Trace Bitmap](#)

[Transform](#)

[Transform Again](#)

[Type Styles](#)

U

[Undelete/Undo](#)

[UnGroup](#)

V

[View Options](#)

W

[Warp/Perspective \(Add\)](#)

[Warp/Perspective \(Edit\)](#)

[Warp/Perspective \(Recall\)](#)

[Warp/Perspective \(Remove\)](#)

[Warp/Perspective \(Save\)](#)

[Work Area](#)

Z

[Zoom In](#)

What's New

This version of EXPRESS includes the following new features and a new interface. Click on the item of interest below and then on the Back button to return to this list.

New Features:

- [!\[\]\(31b03e46ee8a80a1f1467b8c03bd76e8_img.jpg\) Bitmap File Import](#)
- [!\[\]\(7d9665ff04f9d2270c38081c6215a724_img.jpg\) Bitmap File Export](#)
- [!\[\]\(7cea648fec4dfc1e99934873e9173b69_img.jpg\) Reload Collections](#)

New Interface:

- [!\[\]\(815df092dd722ee9268ef8e6d0193e3a_img.jpg\) Icon Identifiers for Fonts](#)
- [!\[\]\(c72edb9626cad660f3a9f5fb0f22a68c_img.jpg\) New Document Button](#)
- [!\[\]\(0c564128c6342bd2f601e97f4518828a_img.jpg\) Open Document Button](#)
- [!\[\]\(5cb79a1c9acdf5d94bce345803852578_img.jpg\) Print Document Button](#)
- [!\[\]\(cc23775bf31a648cde5902baa397f9aa_img.jpg\) Save Document Button](#)

About Arts & Letters EXPRESS

The About Arts & Letters EXPRESS command in the Help menu displays a dialog box containing title, copyright, version, serial number, and other information about your copy of EXPRESS.

The About box also reports the number of objects in the document currently open in EXPRESS.


Accel-O-Draw (F11)

The Accel-O-Draw command in the View menu (or at the button



at the top right) temporarily turns off [multitasking](#) in EXPRESS in order to permit a faster screen redraw. You cannot perform other tasks until redrawing has finished.

If you want a quicker screen redraw and it is not necessary to view the completed drawing at once, hold down the content menu button on the Accel-O-Draw button and drag the cursor to the quick display options. If you need to see your work redrawn at each stage, use Accel-O-Draw. It will cause the drawing to be completed anywhere from 10% to 300% faster, with an average improvement of probably 50%.

Holding down the content menu button on  will display a menu showing other options to speed screen redraw.

If you wish to interrupt Accel-O-Draw and return to a multitasking capability, press Esc.

pop

Add/Remove (Mix) Paint

Add/Remove Paint affects an object's color by either removing the pigments that can be thought of as comprising that object's color or by adding a pigment to the color. The pigments that can be added or removed are represented as any named colors plus the default primary colors and are available in the drop down list box. Add/Remove Paint is intended as a tool by which one can mix (and unmix) colors in a way analogous to the way in which an artist mixes paints on his palette.

pop

Application

A program used for a particular task, such as presentation graphics, desktop publishing, or word processing.

Arch -- Warp Shape

Choosing the arch shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Arch Shapes

Arrange Objects Flyout



The Arrange Objects flyout displays the following four tools and a pushpin



The tools work on two or more selected objects which you can align, stack (move to front or back), group, and ungroup.

- Aligning Objects**
- Changing Stacking Order**
- Grouping Objects**
- UnGrouping Groups**

pop

Aspect (Condense/Extend Value)

The value, set with the spacing command in the Custom Type dialog box, which represents the width-to-height ratio of text. A condense/extend value of 100% produces text with the standard width-to-height ratio. A value less than 100% produces condensed text, and a value greater than 100% produces extended text.

- The Custom Type Dialog Box**

pop

Attributes

Characteristics of an object. The graphic attributes (which affect symbols, text, and freeform objects) are fill color, fill pattern, line color, and line type. The text attributes (which affect text only) are typeface, type size, leading, character spacing, condense/extend value, text alignment, and type style. All attributes have default settings which you can change.

Bell -- Warp Shape

Choosing the bell shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Bell Shapes

Better Gradients

The Better Gradients command (under Quick Display, Gradients, in the View menu) causes gradient fills to be displayed with greater accuracy and less speed on the screen.

This command affects the screen display only.

Bezier Curves

A Bezier curve is a "cubic polynomial" representation of a curve that allows great flexibility and control in manipulating the curve. Any complex curve can be constructed in Bezier segments. The Bezier curve model is the one used by PostScript. When you export a file in CGM, WMF, or HPGL format, all Bezier curves are translated into straight line (vector) segments for compatibility with those formats.

pop

Bitmap Pictures

A bitmap picture is made of thousands of tiny dots, or pixels. Bitmap pictures are created by "paint" programs like Windows Paintbrush and by scanners.

Pictures in bitmap format can be placed in EXPRESS through the Windows Clipboard. You can also use the [Import](#) command to import a bitmap picture in TIF, BMP or DIB format.

Bitmaps from these "paint" programs are composed of pixels. However, scanned photographs and photographs that appear in newspapers and magazines are composed of tiny dots called halftone dots, which are not the same as pixels. For one thing, halftone dots vary in size, while pixels are a single, much smaller, size. Many pixels form a "halftone cell" that attempts to match the variable size of the halftone dot. The higher the resolution of your output device, the more pixels that make up the halftone cell, and thus the sharper the picture.

Bitmap Smoothing

The Bitmaps/Smoothing command (under Quick Display in the View menu) toggles the smoothing of bitmaps on and off. When bitmap smoothing is turned on, rough edges on bitmaps are smoothed. The amount of smoothing is a function of the type of bitmap image. This command affects the screen display only.

Block Select Tool



The Block Select tool displays the Block Select cursor. Use this cursor to [drag](#) a box around all objects you want to select. A single set of handles appears around the selected objects, and you can manipulate the objects as a temporary group. You can also choose to [group](#) the objects.

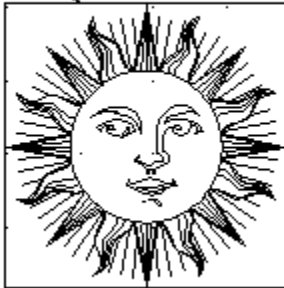
Block Selecting Objects

pop

Bounding Box

The bounding box is rectangle that completely encloses an object. When you use the block select tool, a thin-line bounding box encloses the object(s) as you drag the cursor.

Bounding Box



pop

BMP File Format

The BMP (standard Windows bitmap) file format allows graphic images to be transferred between computer programs. Scanned pictures are often saved as BMP images. EXPRESS can import and export BMP files.

Raster Images

Brightness/Contrast

Brightness is used to adjust the intensity of a color. Increasing the brightness of a color moves (in the color space) the color toward white. Brightening a color makes it more pastel and less saturated. Decreasing the brightness of a color moves the color toward black. There is not necessarily a simple relationship between the effects of this filter on a color and the components of the color in the hues model. Increasing brightness does not necessarily affect only the %White component. Likewise, decreasing brightness does not necessarily affect only the %Black component.

Contrast is used to affect the similarity of groups of colors. Decreasing contrast causes affected colors to appear more similar. Increasing contrast causes affected colors to appear less similar. As contrast is decreased for a collection of colors, the colors move (in the color space) toward middle gray (RGB: 128,128,128). As contrast is increased for a collection of colors, the colors move away from middle gray. Geometrically, Contrast applies a scaling filter that stretches or compresses the component ranges so that colors become closer or farther apart in the color space.

Brightness and Contrast operate in parallel. That is, one can adjust both simultaneously.

Cancel

The cancel button is found in many of EXPRESS' dialog boxes. It allows you to close an operation, discarding any changes. Use the Cancel button to abandon any changes you make with in a dialog box.

pop

CDR File Format

CDR is the extension of Corel Draw file format that EXPRESS can import. Export in CDR format is not supported.

pop

CGM File Format

CGM (Computer Graphics Metafile) files are used by assorted graphics applications.

Chart Types

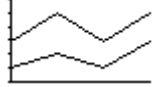
EXPRESS supports five of the most popular chart types:



Area Chart



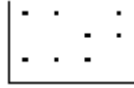
Bar Chart



Line Chart



Pie Chart



Point Chart

Click On

"Clicking on" is the selection of a function or an object with the mouse. Place the [cursor](#) on an item in the menu bar such as a dialog box button, or an object in the Drawing Area. Press and release the left mouse button.

The item is selected when [object handles](#) surround the object and it is named in the style bar.

pop

Clip-Art Collections

Clip-art collections allow you to access hundreds of precolored and preassembled clip-art images. These images are grouped in categories called collections, everything from aerospace to zoology. You can also create and maintain your own collections of artwork. All clip-art collections have a default file extension of YAL.

Clip-Art Manager (Ctrl+M)

A command in the Draw menu. The Clip-Art Manager lets you select from thousands of precolored symbols, art forms, and clip-art images. Each is named and filed by category; for example, "Horse" is filed under the category of Nature-Animals, while "Federal Reserve Bank" can be found in Buildings/Structures.

pop

Clipboard

The Clipboard command in the [Edit menu](#) displays the Clipboard dialog box. Use this dialog box to specify the desired [cut, copy, and paste formats](#); set the resolution for Metafiles; view the contents of the [Windows Clipboard](#); and clear the contents of the Clipboard.

If you are cutting and pasting between EXPRESS documents, choose A&L as the Cut and Paste format. This format preserves all Arts & Letters graphic information.

Clipboard Formats

EXPRESS allows you to cut and paste objects through the Windows clipboard in Arts & Letters, Windows Metafile, and Bitmap formats. A text paste format is also supported.

Choose a cut/copy format that is supported by the application that will paste the image. If an image is cut or copied to the clipboard in Arts & Letters format, choose the desired paste format.

If an image later pasted from the clipboard does not print properly, it will be necessary to import it into your document in one of the file formats supported by EXPRESS.

Clipping Mask

An object used as a "cookie cutter" to clip all objects beneath it. Only those parts of the objects that lie within the mask remain visible after clipping.

CMYK Color Model

The CMYK color model creates colors by mixing different percentages of cyan, magenta, yellow, and black (K). The CMYK model is also called four-color or process color and is widely used in the printing industry. Some common colors and their CMYK values are:

Light Blue	Light Gray	Pink
80/20/0/0	17/8/9/0	0/60/40/0
Dark Blue	Dark Gray	Dark Red
100/60/0/40	55/55/55/0	0/100/100/20
Brown	Bright Green	Purple
60/80/80/0	100/0/69/0	21/42/2/0
Orange	Pale Yellow	
0/60/80/0	0/0/30/0	

Color Palettes

Color palettes are sets of named colors, usually related in some way and/or designed for a specific purpose. Palettes included with EXPRESS include wood colors, food colors, jewel colors, flesh tones, and more.

Color Separation

EXPRESS allows you to print a separate page for each color of your work, which you can then take to a color print shop. This separate page for a given color is a color separation. Process, or four-color, separations use four basic colors which print dot patterns over one another and mix in the eye to form various colors. Spot-color separations use many distinct colors which essentially do not overprint and which are pre-mixed by the ink supplier.

Note that only named colors can be spot separated; therefore, if you mix a color for use in a document, select the Name button in the Custom Color dialog box to name the color.

Color separations can be printed to PostScript-capable devices only. If a PostScript printer is not selected as the current output device, the separation options are grayed and cannot be selected. To print separations to a file, use the Printers section of the Windows Control Panel to connect a PostScript printer to the port FILE. Select this printer as the target printer in Arts & Letters, and choose the Print button in the Print dialog box. (Do not use the To File button).

To print color separations, choose Print from the File menu. In the Separations field, click on Spot or Process, then on Setup. A dialog box appears.

Highlight the colors desired from the list by clicking on each one. A separate print will be generated for each selected color. (Normally you will select all colors.)

In the Printing field, set the Emulsion Down and Negative Image options according to the preferences of your print shop. Typically, both options are turned on.

In the Screen field, enter the desired [screen angle](#) and [frequency](#). Only your print shop can supply values other than the defaults.

In the References field, choose to print [marks](#) and [labels](#) if desired, then click on OK. Typically, both options are turned on.

If you wish to change the default [undercolor removal](#) parameters, click on UCR. The defaults are most likely to work best.

Click on OK in the Print dialog box. The separations are automatically generated and printed. If you print to a file, only one file is created; when that file is printed it will produce a separate print for each separation.

Color Style Button



The Color style button displays the color palette. Use it to select colors for the lines and the interior fill of objects.

First check the Line and/or Fill boxes to apply the color to an object's lines or interior.

Look over the choice of colors; scrolling may be necessary. If the premixed colors are not sufficient, press Custom to mix your own. Clicking on the Content menu (right mouse) button would have taken you immediately to the Custom dialog box.)

Click on the color in the palette (or Apply the mixed custom color), and the color is applied to all selected objects.

 **The Color Palette**

 **The Custom Color Dialog Box**

pop

Color Wash

Color Wash replaces the color with a selected percentage of another color (wash). e.g., if you wash a 100% cyan object with 40% yellow, the result is an object that is 60% cyan and 40% yellow.

pop

Colorize with Base Color

Colorize with Base Color replaces the color with percentages of a selected base color, in a manner similar to Convert to Grays.

pop

Content Menu

A Content menu is the list of command options displayed for a selected object when the [content menu button](#) is pressed and held.

pop

Command

A command is an instruction given to a computer. A menu is a list of commands, and the toolbox places commands under icons.

Command Button

A three-dimensional rectangle with rounded edges, found in a dialog box, that shows a command (such as Apply, Cancel, OK, Save, or Open).

Complex Curve

A curved shape made up of more than one Bezier segment. When you draw a curved shape with EXPRESS, it is automatically converted into a simple (single Bezier segment) or complex (multiple Bezier segments) curve. You can use the Complex Curves check box in the Drawing Options dialog box to specify that you want a sketched curve converted to a single Bezier segment.

Bezier Curves

Construction Flyout



The Construction flyout displays the following tools for modifying freeform objects:



Add Handle Tool



Split Tool



Make Horizontal/Vertical



Make Joins Smooth Tool



Align Selected Points Horizontally



Align Selected Points Vertically

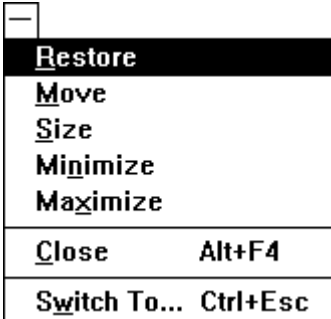


Specify Freeform Values

pop

Control Menu

The control menu is found in every application window. It is located in the upper left-hand corner of an application window and contains commands used to change the window's size and location, to close the application, or to switch to another application. To display the Control menu, hold down Alt while you press the Spacebar, or point to the Control menu box and click the left mouse button.



pop

Convert to Grays

Convert to Grays changes a color to its corresponding grayscale color. The K (black) value of the original color is preserved as much as possible. A color with a K of 0 will be converted to a gray with K of 0. A color with a positive K value will be converted to a gray with a positive K value.

pop

Convert to Grays (K only)

Convert to Grays (K only) changes a color to its corresponding grayscale color with the CMYK values: C=0, M=0, Y=0, K=grayscale value.

Convert to Pure Shades

Convert to Pure Shades sets the %White of a color to zero.

pop

Convert to Pure Tints

Convert to Pure Tints sets the %Black of a color to zero.

Convert to Pure Hues

Convert to Pure Hues sets the %White and %Black of a color to zero.

pop

Convert to Primaries

Convert to Primaries changes a color to the closest or most similar primary color: White, Red, Green, Blue, Cyan, Magenta, Yellow, or Black.

pop

Convert to Color Negative

Convert to Color Negative replaces the color with its complement color. For example in (CMYK), the color (20, 30, 40, 0) becomes (80, 70, 60, 0). The K component is preserved as much as possible.

pop

Convert to Gray Negative

Convert to Gray Negative replaces the color with the complement of its corresponding grayscale value.

pop

Convert to Display Solids

Convert to Display Solids replaces the color with the most similar Windows System Color for a 16 color display, replaces the color with the most similar EXPRESS Windows Palette color for a 256 color display, and is not available for a high color or true color display.

pop

Convert to Opti-Pal Colors

Convert to Opti-Pal Colors replaces the color with the most similar dithered EXPRESS Windows Palette color. This filter is available only for 256 color displays. This filter can remove dithering artifacts without substantially changing the color of an object and is used to optimize the 256 color displayed appearance of an object.

pop

Corner Join

A non-smooth join between two curve segments, or between a curve and a line segment.

Current Page

The current page is the page wherein the most recent action (adding, moving, or manipulating an object) was performed. Selecting an object on a page also makes that page the current page.

pop

Cursor

A small graphic symbol you move around on the screen with the mouse or the keyboard arrow keys to choose commands and accomplish various tasks. Many tools have cursors relevant to the work that they do.

Curve Segment

A single Bezier curve. Curve segments are marked by a handle at each end.

Custom Collection

Individual or grouped objects organized into collections using the Create Clip Art Collection dialog box in the Collection menu of the Clip Art Manager or the Activity Manager. The default extension for custom collection files is .YAL.

DEF File Format

DEF stands for [defaults](#), and is the file extension used by EXPRESS for its default files. DEF files will save defaults for color, fill, line weight, type attributes, viewing options (e.g., whether in inches or picas, whether there is a grid), page setup, printer setup, and several other settings. Chart.DEF saves the type of chart and its colors and elements.

Access DEF files through Defaults/Open in the [File menu](#). Each user can create his own personalized DEF file, then open it when starting an EXPRESS session. You can also save your settings to apply to all future EXPRESS sessions by saving your defaults to the file Startup.DEF.


Deleting Files

You delete the files from EXPRESS' open dialog box. The files created by EXPRESS are called documents (or GEDs). If you want to delete a document, select it in the files list and click on Delete.

pop

DIB File Format

The DIB (Device Independent Bitmap) file format allows graphic images to be transferred between computer programs. EXPRESS can import DIB files.

 **Raster Images**

Dither

A method of placing black or color pixels in an image to produce the effect of various shades of gray or color. EXPRESS uses color dithering to simulate colors not available on the screen because of specific graphics card limitations.

Deselect All (Shift+A)

The Deselect All command deselects all selected objects in a document. Clicking on an empty area of your screen also deselects all objects.

pop

Dialog Box

A Dialog box appears when EXPRESS needs more information before it can carry out a [command](#). When you click on a command that is followed by three dots (...), a dialog box will appear, asking for responses such as Apply/Cancel, Yes/No, etc.

Document Precision

To change the document precision, pull down the [File menu](#) and select Page Setup, then click on the Document Precision button.

The document precision value determines the "fineness" of the internal grid that EXPRESS uses to render images. The fact that the size of this grid is a fixed number entails a few important considerations.

First, there is a limit to the image size that can be created in EXPRESS. The normal document precision for EXPRESS is 1440 units per inch. Dividing this number into the grid size gives a maximum image size of a little over 22 inches square. In order to render a larger image, the Document precision command can reduce the units per inch to as small as 180 so that an image over 177 inches square can be created. Second, there is a tradeoff between largest image size and drawing fineness. EXPRESS always prints at the highest resolution of your output device. However, the practical effect of drawing using, for example, 180 units per inch is to print curves that are not perfectly smooth because fewer coordinates are available to render curve segments.

DIF File Format

Data Interchange Format, supported by many spreadsheet programs.

Drag

To drag a cursor, you press and hold the left mouse button, then move the mouse. When done, release the mouse button. From the keyboard this is done by holding down the Spacebar while pressing the arrow keys.

pop

Draw Tools Flyout



The Draw Tools flyout displays the line and curve tools.



Drag the Line or Curve cursor to draw. A freeform object, with freeform points marking the segments, is created as you draw. When finished drawing lines or curves, click the Content menu (right mouse) button. On the first click, the edit cursor appears and the lines can be edited. On the second click, object handles appear around the lines and the lines are drawn using the current graphic attributes.

pop

DRW File Format

DRW is the extension of a graphics file format that EXPRESS can import. Export in DRW format is not supported.

pop

Duplicate (Ctrl+D)

The Duplicate command in the Arrange menu displays the duplicate cursor.

[Move](#) or [size](#) objects using the duplicate cursor to create duplicates at the new position or size.

pop

Duplicate Tool



The Duplicate tool changes the cursor to the Duplicate cursor.

[Move](#) or [size](#) objects using the duplicate cursor to create duplicates at the new position or size.

pop

DXF AutoCAD File Format

DXF is an file extension for AutoCAD, whose files EXPRESS can import.

pop

Effects Flyout



The Effects flyout displays a flyout toolbar.



These special effects tools allow you to merge and blend objects, to bind text to a shape, to extrude objects, and to warp objects.

- Merging Objects**
- Blending Objects**
- Binding Text to Shape**
- Extruding Objects**
- Warping Objects**

pop

Emulsion

Emulsion is the light-sensitive layer of chemicals that coats photographic film or paper. A service bureau or printer typically wants color separation files with the emulsion side down.

pop

Enter/Apply Key

Pressing the Enter or the Apply key carries out an action. In some dialog boxes, instead of clicking on Done with the mouse, you can press Enter on your keyboard. In the case of typing letters in the Enter/Edit Words dialog box, the Enter key starts a new line, and the Add button must be used to place the text on the page.

EPS File Format

The Encapsulated PostScript format is a vector file format that allows graphic images to be transferred between computer programs. EXPRESS can export and import files in the EPS format.

pop

Even/Odd Fill

A method for shading the interior of a closed shape. Shading begins at the first border, stops at the second, begins at the third, etc.

Exit

The Exit command closes EXPRESS. When you choose the New command, you are prompted, "Save changes to (untitled)?" You can choose Yes to save the current drawing, No to leave EXPRESS without saving the drawing, or Cancel to continue the current session.

Export

The Export command lets you export any image created in EXPRESS in any of the following formats -- [EPS](#), [CGM](#), [TIFF](#), [SCODL \(SCD\)](#), [WMF](#), [WPG](#), or [BMP](#).

To export an image, choose the destination directory for the object(s) in the drawing area to be exported. The Setup button lets you specify a resolution at which a file should be exported or the resolution and type of screen representation (in the case of EPS files, for example). You can specify 150 dpi, 300 dpi, or a custom resolution. Note that the larger the value, the larger the file size of the image exported. Choose a file format. Note that the file format extension appears by the filename box. Enter the filename and click on **OK**.

 **EXPRESS Decipher Utilities**

Eyedropper



The Eyedropper style button allows you to save specific style elements from one object in EXPRESS and apply them to another. The Eyedropper stores the last saved style until you close EXPRESS.

Click on the Eyedropper with the Content menu button and select the element of an object that you want to save: All, Color, Fill, Line or Type.

To save any or all of these style elements, select the object and click on the Eyedropper with the left mouse button. To apply the styles, select another object and give a click of the Eyedropper with the content menu button.

 **Saving Styles for Future Sessions**

pop

Faster Gradients

The Faster Gradients command (under Quick Display, Gradients, in the View menu) causes gradient fills to be displayed with greater speed and less accuracy on the screen.

This command affects the screen display only.

pop

Files

You save the drawings you make with EXPRESS in files. The files created by EXPRESS are called documents. If you do not save your work in a document, it will be discarded when you exit EXPRESS or start a new document.

Fill

Select Fill in the Styles menu or click on the [Fill style button](#)  below the menu bar to add patterns to the interiors of objects.

Fill Style Button



The Fill style button displays ready-made fill patterns.

To modify the fill pattern and/or color, press Custom or click on the Content menu (right mouse) button to go immediately to the Custom dialog box.)

Click on a fill from those provided or define your own and it is applied to all selected objects.

 **Explore the Custom Fill Dialog Box**

pop

Fixed Disk

The fixed disk of your computer is where your programs and many other files are stored.

pop

Flip Horizontally

The Flip/Horizontally command in the Arrange menu flips a selected object horizontally (produces a mirror image).

Flip Vertically

The Flip/Vertically command in the Arrange menu flips a selected object vertically (turns it upside down).

pop

Flexible Diskette (Floppy Disk)

You can store your files on 3-1/2 inch or 5-1/4 inch flexible diskettes. Flexible diskettes can be removed from your computer and stored elsewhere.

Four-Color Printing

Separating a color image into process color breaks it down into four color components: cyan, magenta, yellow, and black (respectively symbolized by the letters CMYK). A negative from each of these components is created, from which printing plates are made. Paper is run through a printing press and each of the four colors is laid down on the paper in tiny cyan, magenta, yellow, and black ink dots. The eye sees these dots as a whole and combines them into what appears as be a color image.

EXPRESS can print a separation, or separate page, for each of the four CMYK colors for use by a color print shop.

Freeform Object

A freeform object is any combination of connected lines and curves that can be edited in EXPRESS. Freeform objects are those created by using the Line and Curve tools, or symbols converted into freeform objects.

Freeform Shape Edit/Text Point Edit Tool



The Freeform Shape Edit/Text Point Edit tool lets you edit a selected freeform object. Select a freeform object and choose Edit Drawing. Point handles appear on the object and the triangular edit cursor appears. You can [drag](#) the point handles to reshape the object.

When finished editing, click on the Content menu (right mouse) button.

When the object selected is text, the Edit Drawing tool changes to the



Freeform Text tool. This tool allows you to change the attributes and placement of individual words and characters within a single text object.

Modifying Text within a Text Object

pop

Freeform -- Warp Shape

Choosing the freeform shape displays both point handles and control points on the warp envelope. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Freeform Shapes

pop

GED File Format

The GED (Graphic Environment Document) format is a proprietary, efficient file format used by EXPRESS and other Arts & Letters programs to store documents on disk.

pop

Gradient Fills

Gradient fills are composed of a starting color, an ending color, and a series of transitional colors in between. In EXPRESS, you choose the starting and ending colors, and the transitional colors are generated automatically.

Gradient fills are modified in the Custom Fill and the Custom Style Bundles dialog boxes.

Graphic Attributes

Attributes are characteristics of an [object](#). The graphic attributes are color, fill, line, and type. Text attributes are typeface, type size, type style (normal or italic), and alignment. All attributes have default (predetermined) settings that you can change. Attributes of your own can be saved within a single EXPRESS drawing session by selecting the model object and pressing Ctrl+R; they are then applied to other objects by selecting them and pressing Shift+R, or by using, respectively, the left and Content menu mouse button with the Eyedropper.

Group

A group is two or more objects bound together using the Group command. You can manipulate a group as if it were one individual object. The objects are grouped together until you ungroup them using the Break Apart command.

Group Command

Group (Ctrl+G)

Click on the Arrange Tool and select the Group icon  or pull down the Arrange menu and select the group command to group all selected objects. You can also use the accelerator keys above. One set of handles appears around the objects, and EXPRESS treats them as a single object until they are ungrouped.

An individual object within a group can be edited without ungrouping by double-clicking on it. When you click outside the group, the changes made to it are applied, and the group remains intact.

To ungroup the object, use Shift + G, the Break Apart command in the Arrange menu or click on the Break Apart icon in the Arrange Tool flyout.

Hairlines

A hairline is the thinnest possible line that an output device is capable of producing. On high-resolution output devices, a hairline will be so thin as to be almost invisible; on lower-resolution devices, a hairline will be a solid, thin line.

To specify a hairline, enter a line width of 0.0 in the Line styles dialog box. (Choose None in the Line Pattern options to eliminate lines altogether.)


Halftone

A method of using varying sizes of dots to produce the effect of various gradients and shades of gray.

pop

Help Table of Contents

The Help Table of Contents command in the Help menu displays a table of contents for EXPRESS Help. Click on a topic in the table of contents for further information.

The Inquiry button  in the lower left of your EXPRESS screen also displays the same table of contents. An inquiry button is present in many dialog boxes for immediate access to help for the items and functions associated with the dialog box.

pop

Hide/Unhide Objects Flyout



The Hide/Unhide Objects flyout displays the Hide and Unhide tools.

The Hide tool prevents the selected object from being (accidentally) modified and removes it from view. It remains in your document but cannot be viewed or selected until shown by clicking on the second icon in the Lock flyout menu.



The Object Browser, a dialog box for Locking, Hiding, and Naming from a list all the objects in your document, is accessible by pressing Ctrl+H or the Backspace key.

pop

Hint Line



The Hint Line is the bar stretching across the very bottom of your EXPRESS screen, displaying a brief description of the item currently under the cursor. It should be your first resource for on-line Help.

pop

Hues Color Model

The Hues color model creates colors by starting with a particular color and then adding different amounts of white and/or black. Some common colors and their Hues values (in the form hue/percent white/percent black) are:

Light Blue	Light Gray	Pink
195/20/0	172/90/8	340/40/0
Dark Blue	Dark Gray	Dark Red
240/0/40	0/100/55	0/0/20
Brown	Bright Green	Purple
0/50/60	138/0/0	272/59/2
Orange	Pale Yellow	
15/20/0	60/70/0	

pop

Icon

An icon is a small picture that suggests what a tool or cursor does. For example, the Draw Line icon in the [Toolbox](#) shows a picture of a pencil drawing a line.

Imagesetter

A high-resolution PostScript printer that creates camera-ready prints on resin-coated paper or on film.

pop

Importing Files

The Import command lets you import text files (TXT and DOC are the typical extensions) and clip-art images into EXPRESS from any of the following formats -- [PS](#), [EPS](#), [CGM](#), [DXF](#), [TIF](#), [WMF](#), [WPG](#), [CDR](#), [BMP](#), or [DIB](#).

Click on the special file type to select it.

Go to the directory where the import file is located, click on a file name in the list, then click on OK. The Add Object cursor appears. Click the left mouse button to add the image into the EXPRESS drawing area at its default size, or [drag](#) the mouse to size a [bounding box](#) for the image.

Note: Text must be in ANSI or ASCII format to be imported into EXPRESS.

 **Converting file formats with Decipher**

 **See also: Defaults**

Italics

You can select this option in the Custom Type dialog box, accessed by clicking the [content menu button](#) on



to make letters and numbers slant (either to the right or left). Italics add emphasis to words by slanting them.

This sentence is in italics.

If you select Italics from the Custom Type dialog box, EXPRESS shows you a default of 15 degrees, which you can change. Put a minus sign (-) in front of the numbers to slant the letters to the left.

Justified

Justified text is an option in the [Custom Type](#) dialog box. All lines in a justified paragraph are of equal length. This version of EXPRESS does not wrap words, so you must supply the line breaks.

pop

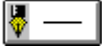
Kerning

Moving text characters to optimize the spacing between them. Some letter combinations (such as A v, T y, etc.) appear to be spaced too far apart. Kerning tightens the letter spacing for these pairs to compensate for this effect.

Leading

The amount of vertical space, measured in points, between the base lines of two successive lines of text in a text object. Set the leading value using the Spacing command in the Custom Type dialog box. Use a value greater than the type size value to separate lines of text, or use a lesser value to overlap text lines.

Line Style Button



The Line Style button displays the Line Styles palette. Use this palette to select a predefined line style, or click on the Custom button to see the Custom Lines dialog box and specify a line width and a [line pattern](#).

A list box displays a list of named line styles. To select a named style, click on the name in the list. To modify the line width or pattern, press Custom. Clicking on the Custom button with the Content menu (right mouse) button would have taken you immediately to the Custom dialog box.)

Click on OK to apply the current styles or those you have defined to the lines of all selected objects.

 **Explore the Custom Lines Dialog Box**

pop

Line Width

Line width can be specified from 0.0 to 72.0 points (72 points = 1 inch). A 0.0 width line is also known as a "hairline"; it defines the thinnest possible line that an output device is capable of producing. (To eliminate a line, choose None as the line pattern.)

pop

Line Pattern (Ctrl+L)

Line Pattern is an attribute found in the Line styles dialog box, accessed by clicking the content menu button on



or by pressing Ctrl+L.

EXPRESS includes a solid line pattern, an assortment of dashed line patterns, various line thicknesses, and arrowheads in assorted shapes. Select "None" to eliminate all lines from a selected object.

Lock\Unlock Objects Flyout



The Lock\Unlock Objects Flyout displays the Lock and Unlock tools.

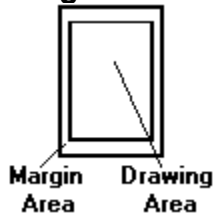
The Lock\Unlock tools prevent the selected object from being (accidentally) modified. The object remains visible but cannot be selected until it is unlocked by clicking on the unlock button.



[Object Browser](#) allows you to lock, hide, and name objects from a list all the objects in your document. You can access the Object Browser by pressing Ctrl+H or the Backspace key.

pop

Margins



Margins are areas of empty space at the top, bottom, and left and right edges of a document. When you specify margins in EXPRESS, the document work area displays only the "live" area of a page. Therefore, if you place an object at the edge of a page on the screen, it will not print at the edge of the paper, but will be indented by the amount of the margin.


pop

Make Proportional

The Make Proportional command in the Arrange menu restores a clip-art symbol, text object, or freeform shape to its standard proportions if it has been sized non-proportionally.


pop

Maximize Button

The Maximize button  enlarges the Arts & Letters window to cover the entire area available on your screen.

pop

Minimize Button

The Minimize button  reduces the Arts & Letters window to the Arts & Letters icon.

pop

Mouse Button

Typically a mouse has an inside, or left, and right, or secondary, button. Use the left mouse button to select objects and to click on dialog box buttons and tools in the [Toolbox](#). In EXPRESS the right button is called a content menu button because it displays and activates functions related to the content menu. Use it to complete editing of a freeform object and to access the custom features of the Style buttons.


pop

Multi-tasking

Multi-tasking is the ability of a computer to perform several tasks at once. While true multi-tasking is available in the Windows environment only under Windows NT, many EXPRESS tasks can be performed simultaneously if you do not leave the program; for example, you can execute commands while the EXPRESS screen is redrawing.

Naming and Saving Colors

To save a palette:

Hold down the content menu button on the Color style button () and drag the cursor down to highlight Save As.... The Save Palette As dialog box appears, offering the default extension of .pal for the filename you wish to assign to the colors showing in the current EXPRESS color palette.

Negative Image

Printing plates for a printer are typically made from negative film, or film with clear images on a black background. You can make color separation files in EXPRESS when you [print to file](#) by checking the Negative image check box.

New Document



The New button on the Style Bar performs the same action as the New command in the File menu. Clicking on this button clears the drawing area so you can start a new drawing. When you click on the New button, you are prompted, "Save changes to (untitled)?" You can choose Yes to save the current drawing, No to clear the drawing area, or Cancel to keep the current picture on the drawing area.

pop

Non-Proportional (Sizing)

When you [drag](#) one of the four middle [handles](#) of an object, you flatten or stretch the object, and it no longer has its original width-to-height proportions.

pop

Object

An object is a single graphic, such as a symbol, text object, freeform object, or clip art. An object can be a group of many composite objects. For example, an airplane object can consist of wings, propellers, and canopy objects, each of which becomes an object when the group is ungrouped.

Object Cache (Clear)

The Object Cache command (under Quick Display in the View menu) lets you clear the contents of the cache.

When the object cache is on, warps, bitmaps (excluding 24-bit), and text on a path are stored in memory when created or edited. Whenever the screen is redrawn, these elements are drawn quickly from the memory cache instead of more slowly from the disk. If several objects are in the cache, they may use a significant amount of memory. Choose the Clear command to empty the cache.

Object Cache (On/Off)

The Object Cache command (under Quick Display in the View menu) lets you toggle the object cache on and off.

When the object cache is on, warps, bitmaps (excluding 24-bit), and text on a path are stored in memory when created or edited. Whenever the screen is redrawn, these elements are drawn quickly from the memory cache instead of more slowly from the disk.

Object Handles

When you select an object, eight small squares surround it. A ninth handle marks the center of the object.

Objects can be resized by [dragging](#) the object handles. Use the corner handles to size the object proportionally. The middle handles allow you to stretch or flatten the object.

Object Viewer

The Object viewer, found at the top of the Drawing Area, displays the type and the name of the object selected. A click of the left mouse button on the down arrow displays a list of the objects in the document, with the selected object (if there is one) highlighted. Click the Content menu button to display the Object Browser; press and hold the content menu button to display a content menu that allows you to choose among Browser, Lock, and Hide options.

Explanation of Object Viewer Icons

pop

One-Point Warp Perspective

Choosing the one-point perspective shape immediately reshapes the selected object using a one point perspective effect. [Drag](#) handles on the warp envelope to adjust the perspective of the object.

If Show Perspective Lines is on in the Options menu, dashed perspective lines are displayed to show the current vanishing point. Drag the vanishing point to reshape the object.



One Point Perspective Shapes

pop

Open Document



The Open button on the Style Bar performs the same action as the Open command in the File menu. Clicking on this button with the left mouse button displays the Open dialog box. Use this dialog box to open [GED](#) files.

Clicking once with the right mouse button on the Open button will display the Import dialog box, which allows you to import an existing file in a variety of formats. Clicking and holding the Open button with the right mouse button displays a content menu which provides you with the options to Import or Open an existing file.

If you forget to close your current work, don't worry: you will always be given a chance to save before proceeding.

pop

Open Shape/Closed Shape

Open shape is a freeform object consisting of one or more line or curve segments, and terminating with an end point at each end of the object.

Closed shape is a freeform object consisting of two or more line or curve segments, and forming a closed object without end points. Only closed shapes can have fill styles.

pop

Page Border

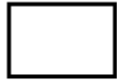
The page border establishes the boundaries of a page. You can draw up to and beyond a page border. The parts of any objects that cross a page border will appear on a different page when printed.

pop

Page Orientation



Portrait
(Tall)



Landscape
(Wide)

A page is in either one or the other of the orientations shown here.

Page Size

Standard page sizes supported by EXPRESS:

Name	Inches	Centimeters
Letter	8.50 x 11.00	21.59 x 27.94
Legal	8.50 x 14.00	21.59 x 35.56
Tabloid	11.00 x 17.00	27.94 x 43.18
A3	11.69 x 16.54	29.70 x 42.00
A4	8.27 x 11.69	21.00 x 29.70
A5	5.83 x 8.27	14.80 x 21.00
B5	7.17 x 10.12	18.20 x 25.70
35mm Slide	7.34 x 11.00	18.64 x 27.94
Graphics Screen	8.25 x 11.00	20.96 x 27.94


Custom sizes are also supported. In the Page Setup dialog box, enter the desired size.

PIC File Format

A graphics format used by Lotus 1-2-3, Picture Perfect, and other software. EXPRESS can import PIC files.

pop

Pointer

The Pointer  is the cursor, or mouse-controlled [icon](#), you use to select objects and commands and to [drag](#) handles. The Pointer cursor is the [default](#) cursor for EXPRESS.

PostScript

A page description language, designed specifically to transfer information from a computer to a raster printer. The printer contains an interpreter that translates the PostScript commands into graphics objects on a page. EXPRESS can print to PostScript printers and export documents as PostScript files.

pop

Print Document



The Print button on the Style Bar performs the same action as the Print command in the File menu. Clicking on the Print button displays the Print dialog box which allows you to specify a variety of printing options.

pop

Print References for Separations

References that label each color separation and that create crop marks (for trimming the final page size) and registration marks (for aligning color separations on the printing press) are provided when printing a document from EXPRESS if the appropriate box is checked under Options for spot color or four-color separations. Since separation prints are made in black and white, it is helpful to have labels noting which print matches which color.

The reference marks and labels created by EXPRESS are placed at the edges of the page as defined by the currently-selected page size and margins. If your page layout does not include a margin area, the marks and labels will not print.

pop

Printer Fonts

EXPRESS supports Windows-compatible hardware and software fonts. Fonts are typefaces of a particular style and size, and they are distributed by many vendors including Adobe and Bitstream. Font files must be loaded in Windows before EXPRESS can recognize them. And although EXPRESS can create a print file that can be carried on diskette to be printed on another printer, final printing requires that the correct hardware fonts be loaded to it. See the Window user's guide or your type manager guide for further information.

Proportional (Sizing)

When an object is proportionally sized, it keeps its width-to-height proportions. To proportionally size an object, click on and [drag](#) one of its corner handles.

Press the Shift key while sizing proportionally to size from the object's center outward.

Pressing the Ctrl key while sizing with a corner handle temporarily overrides proportional sizing, allowing non-proportional sizing.

PS File Format

PS is the extension of the PostScript file format. EXPRESS can import files created in this format. PostScript files often have other extensions, notably AI and PRN.

Quick Display/Show Fills

The Show Fills command (under Quick Display in the View menu) toggles the display of interior fills on and off.

This command affects the screen display only.

Quick Display Bitmaps

The Bitmaps command (under Quick Display in the View menu) toggles the display of [bitmaps](#) on and off. When bitmaps are turned off, all bitmaps are displayed as shaded rectangles.

This command affects the screen display only.

Quick Display/Show Wide Lines

The Show Wide Lines command (under Quick Display in the View menu) toggles the display of wide lines on and off.

When Show Wide Lines is off, all lines are displayed as [hairlines](#).

This command affects the screen display only.

Raster Image

A raster image is defined as a collection of pixels (dots). The raster image of a line, for instance, is stored in a bitmap that contains information about the status of each pixel in the entire display, and which is then displayed in a series of horizontal raster lines made up of individual pixels. (The raster is the set of raster lines that make up the display.) Raster images cannot be manipulated as easily as vector or object-oriented images.

EXPRESS offers a number of ready-made raster fills in the Custom Fill and the Custom Style Bundles dialog boxes.

Replace Hue

Replace Hue fixes the Hue of a color to a specific value. Replace Hue provides the best results for objects which contain tones, tints, shades of the same or similar hues.

Resource Libraries Flyout



The Library tool displays four options.



Releasing the mouse button on the first option displays the Clip-Art Manager dialog box. Releasing on the second option displays the numbered Symbol dialog box; the third, the Activity Manager; and the fourth, Charting.



How to Use the Clip Art Manager



How to Use Symbols



How to Use the Activity Manager



How to Create Charts and Graphs

pop

RGB Color Model

The RGB color model creates colors by mixing different amounts of red, green, and blue. Some common colors and their RGB values are:

Light Blue	Light Gray	Pink
51/204/255	211/235/231	255/102/153
Dark Blue	Dark Gray	Dark Red
0/0/153	115/115/115	204/0/0
Brown	Bright Green	Purple
102/51/51	0/255/79	202/147/250
Orange	Pale Yellow	
255/102/51	255/255/179	

pop

Ring -- Warp Shape

Choosing the ring shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Ring Shapes


Roller Coaster -- Warp Shape

Choosing the roller coaster shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Roller Coaster Shapes

Rotate

To rotate an object means to turn it around some point. In EXPRESS this is done interactively by clicking on the Rotate tool , or done by entering an absolute degree rotation after clicking on the **r**: button in the transform bar.

x:	3.69	y:	1.89	in. r:	0.0°	h:	0.0°	v:	0.0°
----	------	----	------	--------	------	----	------	----	------

pop

Rotate Tool (Transform Objects Flyout)



The Rotate tool changes the cursor to the Rotate cursor for interactive object rotation, and displays the center point cursor.

[Drag](#) the center point cursor to set the pivot point around which rotation will take place.

Point on an object handle and drag to rotate the object around the center point cursor.

To the right of Rotate in the flyout menu



is the Slant tool, which allows you to interactively slant any object.

Slanting an Object

Specifying Absolute values for Rotation

pop

S-slope -- Warp Shape

Choosing the slope shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



S-Slope Shapes

pop

Saturation/Shade

Saturation adds white to or removes white from a color. In the Hues model, Saturation affects the %White.

Shade adds black to or removes black from a color. In the Hues model, Shade affects the %Black.

Save Document



The Save button on the Style Bar performs the same action as the Save command in the File menu. When clicked with the left mouse button, the Save button saves the current document to the path and name shown in the title bar if the document has previously been saved. If the document has not been named, the Save Document As dialog box appears so you can give your document a filename.

Clicking once on the Save button with the right mouse button displays the Export Files dialog box, which allows you to export the current file in a variety of formats. Clicking and holding on the Save button with the right mouse button displays a context menu which provides you with the options to Export, Save, and give your document a new file name.

pop

SCODL (SCD) File Format

SCODL (Scan Conversion Object Description Language) files are used by Matrix and other film recorders to print high-quality 35mm slides.

pop

Screen Angle

A color separation printed to file creates a pattern of tiny dots for screens and halftones that print with that color. These dots must align perfectly with dots on another separation to avoid wavy patterns called "moirés." This is accomplished by rotating the dot pattern for each separation a few degrees. This degree of rotation is called the screen angle. Each high-quality imagesetter owned by a service bureau or printer specifies these screen angles for each color model, separation, and resolution. These businesses can supply you with that information. The EXPRESS default angles are 72 degrees for cyan, 18 degrees for magenta, 0 degrees for yellow, and 45 degrees for black.

Screen Frequency

Screen frequency, or screen ruling, is the number of halftone dots per vertical or horizontal inch printed by an imagesetting machine. A low screen frequency gives a grainier image. This may be desirable because of the quality of the paper on which you finally print (such as a 65 line per inch screen frequency for newsprint), because of the limitations of the printer (quick print shops usually can't print finer than 133 lpi), or because the effect is more artistic for a given piece.

Screen frequency is often confused with resolution, which refers to the exactness or "hardness" of each halftone dot, rather than to the number of dots in a one-inch row or column.

Each high-quality imagesetter owned by a service bureau or printer specifies screen frequencies for use in combination with each color model, separation, and resolution. These businesses can supply you with that information.

Scroll Bar

The scroll bar is located on the right and bottom edges of the EXPRESS window, and in some dialog boxes scroll bars have an arrow on each end and a scroll button. Click on the arrows to move the drawing area up or down and left or right in small amounts. [Drag](#) the scroll button and then release the mouse button to move quickly in the drawing area.

pop

Scroll Bar and Slider Button with Custom Color

For all the color models in EXPRESS the Slider Button moves along a spectrum that is split horizontally. The bottom half of each spectrum is constant, showing the range of subtraction or addition of the color on that bar. The top half varies, showing the effect of all the other colors in the model upon that particular color element.

The arrow buttons at either side of the color bar allow more precise subtractions or additions of color.

pop

SDL

SCODL is a graphics format used by Matrix film recorders and other devices. For example, a SCODL file could be printed to a 35mm slide file recorder.

Selecting Objects Using Shift+Click

To select objects using Shift+click, point and click on the first object to be selected. Hold the Shift key and click on additional objects. Handles appear around each selected object. The selected objects can be grouped by pressing Ctrl+G.

During freeform editing, use Shift+click in this way to select multiple point handles.

pop

Service Bureau

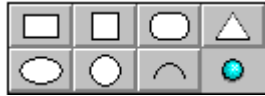
A service bureau is a business that specializes in outputting high-resolution graphic images in various formats. The telephone directory of every major city lists such businesses. If there is not one in your town, contact a color printer.

If you are printing in color, either the bureau or printer will typically want a print file containing color separations. They will give you a form asking for detailed information regarding your documents. The topics below will give you that information.

Shapes Flyout



The Shapes flyout displays seven frequently used shapes.



Hold the [mouse button](#) down and move it over the desired shape. Release the button to select that shape. Click the mouse button for the symbol to appear at its default size, or [drag](#) it to size a [bounding box](#) for the symbol. When you are through adding one or more of the symbols, click on the Content menu (right mouse) button to cancel the operation.

pop

Show Control Points Button

During freeform editing, the Show points button toggles the display of curve [control point handles](#) on



and off



When Show Points is on, curve control points will be displayed during freeform editing whenever a point on a curve is selected. You can then [drag](#) the control points to adjust the curve. You can also toggle curve control points on and off using the Point Display/Control Points command in the View menu. During object editing, the Show Points button toggles the display of freeform points on and off.



When Show Points is on, selected freeform objects will display diamond-shaped freeform points as well as the usual object handles.

pop

Show Gradients

The Show Gradients command (under Quick Display, Gradients, in the View menu) toggles the display of gradient fills on and off.

This command affects the screen display only, and speeds redraws when checked on.

pop

Slope -- Warp Shape

Choosing the slope shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Slope Shapes

Smooth Joins

Joins between lines and/or curves that are tangent to each other.

Snap To Button

The Snap To button toggles through the following snap options; Snap to Points, Snap to Grid, and Snap Off.



When Snap to Points is on, the cursor will snap a selected freeform point to another point when it is moved within the snap radius of the point. This lets you start drawing a line or curve exactly from an existing freeform point, or place a point exactly on another point.





When Snap to Grid is on, the cursor will snap a selected freeform point to a grid point when it is moved within the snap radius of the grid point. This lets you start drawing a line or curve exactly from a grid point, or place a point exactly on a grid point. The grid need not be displayed.



Snap off.

The Snap radius can be adjusted under Snap Options.

 **Specifying Grid Options**

 **Specifying Snap Options**

pop

Split (F6)

The Split command (under Construct in the Draw menu) displays the Split cursor.

During freeform editing, point the Split cursor on a line or curve and click the mouse. Open shapes are split into two open shapes; closed shapes are split into open shapes.

pop

Spot-Color Separations

Spot-color separating an image allows the printing of a separate page for each color, none of which prints over another color except for a small overlap where colors are adjacent. A print shop can then combine the separate prints to recreate the original color image.

When you choose Print in the File menu, the Print dialog box offers you options for spot color separations.

pop

Styles



When you click on the Styles button you see a list of names that indicate unique combinations of fill color, line color, back fill color, fills, lines, and type. Custom styles are also accessible through the Style Bundles command in the Styles menu. You can click on one of these existing styles to apply it to a selected object, or create your own combinations of these styles and name them for use in future EXPRESS sessions. The most basic use of the Custom Styles dialog box is to select none for no fill or solid. Existing custom styles can be renamed or deleted by the above procedure.

The Custom Styles Dialog Box


pop

SYLK File Format

SYmbolic LinK format, supported by Microsoft Excel and other programs.

pop

Text Alignment

EXPRESS supports four word alignments through the Custom Type dialog box, accessed with a [content menu button](#) click on :

Left aligns shorter lines of words in the text object with the left edge of the longest line.

Right aligns shorter lines of words in the text object with the right edge of the longest line.

Centered centers shorter lines in relation to the longest line in the text object.

Justified inserts space between words in shorter lines until they equal the length of the longest line.

EXPRESS does not wrap text automatically.

To align the entire text object itself with some other object, select it and that other object, and select Align from the Arrange menu (or press Ctrl+N) to display the Align dialog box.

Text Attributes

Each text object in the EXPRESS drawing area has text attributes which can be changed as desired. Among these attributes are typeface, type size, type style (normal or italic), spacing, and alignment. In addition, words are objects and so have all the attributes of [graphic objects](#).

Text Tool



The Text tool displays the Enter/Edit Text dialog box.

To enter text, type up to 5,000 characters in the dialog box and click on Add. The Add Object cursor appears; place it where you want the upper left of the words to appear. Click the mouse to have the words appear at their default size, or [drag](#) the mouse to size a bounding box for the words.

To edit words, first select the words in the drawing area and then click with the Content menu (right mouse) button. You can replace or modify the selected words in the Enter/Edit Text dialog box. Click on Replace to replace the old words in the drawing area with the edited words from the dialog box.

 **Using Text**

 **Modifying Text within a Text Object**

pop

Type Spacing

Type spacing can be applied to Arts & Letters typefaces and to printer fonts. In some cases, printer fonts do not contain kerning information, and so cannot be kerned.

Spacing adjustments are applied by pressing the Spacing button in the Custom Type dialog box. There you can adjust letter spacing (the space between all letters), word spacing (the space between words), leading (the space between lines), kerning (the space between special pairs of letters, such as "Te"), and the [aspect](#).

 **The Custom Type Dialog Box**

 **Modifying Text Within a Text Object**

pop

Type Style

EXPRESS supports four type styles for printer fonts:

Normal **Bold** *Italic* Underline

Type (words or letters) can be slanted, colored, or outlined. The Custom Type dialog box, accessed by [content menu button](#) clicking on



allows you to specify how words appear on the Drawing Area.

When using Arts & Letters typefaces, only the normal and italic styles are available. To create the underlined and strikeout styles, draw a line under or through the text. To create a bold style for a typeface, increase the line weight or select a bolder version of the typeface.

 **The Custom Type Dialog Box**

Type Style Button



The Type style button displays the Type Styles palette. Use this palette to select a predefined type style, or click on the Custom button to see the Custom Type dialog box and specify a [typeface](#), [type size](#), [type attribute](#), and [word alignment](#).

Clicking on the Type style button with the Content menu (right mouse) button would have taken you immediately to the Custom Type dialog box.

Click on Italics to set the style of the words to normal or italic.

A list box displays a list of named type attributes. To select a named attribute, click on the name in the list.

Click on OK to apply the attribute to all selected words objects.

 **Explore the Custom Type Dialog Box**

 **Modifying Text within a Text Object**

pop

Two-Point Warp Perspective

The two-point perspective command does not immediately display a default shape. [Drag](#) points on the warp envelope to adjust the perspective of the object.

If Show Perspective Lines is on in the Options menu, dashed perspective lines are displayed to show the current vanishing points. Drag the vanishing points to reshape the object.



Two Point Perspective Shapes


pop

TIF File Format

The Tagged Image File format is a bitmap file format that allows graphic images to be transferred between computer programs. Scanned pictures are often saved as TIF images. EXPRESS reads TIF files.

Toggle

A toggle is a switch or button that is either on or off. To toggle it is to turn it on or off, typically by removing or placing a check in the box placed beside the command.

The pushpin  is a toggle that removes or keeps a box or option list on your screen.

TV Controls

TV Controls uses the YIQ color basis for adjusting a color. The YIQ color basis is the what the National Television Systems Committee (NTSC) uses to encode color television signals. TV Controls provides a novel way to "colorize" grayscale images as well as add color to objects in interesting ways.

Undelete/Undo (Ctrl+Z)

The Undelete/Undo command restores the last object deleted, and undoes move, size, rotate, slant, and style change operations. The command name changes to reflect the most recent operation that can be undone. For example, if you just deleted an object, the command reads Undelete. If you just moved an object, the command reads Undo Move/Size.

Unit of Measure

EXPRESS supports three units of measure: picas, centimeters, and inches. Six picas = 2.54 centimeters = one inch.

A pica is made up of about 72 points. Points are the unit of measure for line thicknesses and type size (using the height of a typeface's capital "M").

pop

Numeric Bar

The Numeric Bar at the bottom of your screen gives information about the position of the cursor and about the measurements of a selected object.

The **x** and **y** buttons give the horizontal and vertical coordinates of the cursor. The **r** button indicates the degree of rotation of a selected object. The **h** and **v** buttons indicate respectively the horizontal and vertical slant of a selected object.

Clicking on a Numeric Bar button while an object is selected displays the Transform dialog box.

 **See Transform**

pop

Vector Drawing

A vector drawing is composed of a series of lines or curves, or a combination of the two. The lines and curves are "seen" by the computer as coordinates mapped out on a grid. A vector drawing of a square, for instance, would be translated by the computer as instructions to draw four straight lines, with each line having a starting and ending point, or coordinate on a grid. A vector drawing of a perfect circle is usually composed of four symmetrical curves (technically referred to as Bezier curves or B-splines) which are arranged in the shape of a circle. Besides the geometry makeup of a vector image, other information is stored, such as fill data, which includes what color the image will be shaded. Another is line attribute data, which includes how thick the lines of the square will be.

When a vector image is enlarged, the computer re-calculates how to draw the stored geometry onto a larger grid. This makes the vector image appear exactly the same as it did when it was at a smaller size. This feature, as well as the storage efficiency of vector drawings, is the prominent advantage they have over bitmap images. On the other hand, it is very difficult (if not impossible) to simulate with a vector drawing the photographic-realism captured by scanned bitmap images

pop

Views Flyout (Zoom In/Out)



The Views flyout displays several tools used to control the viewing level.



Produces a cursor so you can [drag](#) a box around the area of interest.



Zooms out to the previous view.



Saves the current view.



Returns to the saved view.



Zooms to actual view.



Fills the screen with the current page



Fills the screen with all the pages available.



Pins and unpins the options to the screen, letting you have them always available.

pop

Wave -- Warp Shape

Choosing the wave shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Wave Shapes

pop

Wildcard Characters

Wildcard characters are symbols that can be used to replace other characters. The wildcard `?` can be used to represent any character, while the wildcard `*` can be used to represent any group of characters. For more information see your DOS User's Guide.

Windows Clipboard

Objects you Cut or Copy can be temporarily stored on the Clipboard. Objects in the Clipboard can be retrieved with the Paste command (or by pressing Ctrl+V) and added to a drawing. The objects in the Clipboard remain there until you cut or copy other objects to the Clipboard. You can add them again and again to the Drawing Area.

WMF File Format

A Windows Metafile is a file format that allows drawings to be moved from one computer program to another by cutting them to the Clipboard during a computer session or by saving them to disk.

Words (Text) Baseline

The baseline of a text object runs along the base of the letters, ignoring any descenders hanging below the baseline, like the bottom parts of the letters g and y. When aligning text objects, it is usually appropriate to align along the baselines.

Work Area

The work area (referred to as the drawing area) is the blank area bounded by the Style bar at the top, the Toolbox at the left, and the Numeric bar at the bottom of the EXPRESS window.

The Work Area command in the View menu allows you to determine the size of your work area. You can remove parts of the EXPRESS window or, by toggling with Ctrl+7, remove everything except your drawing, for a presentation or a screen capture.

The following are the Work Area submenus:

Show Toolbox: Toggles the Toolbox on and off.

Show Status/Style Bar: Toggles the Style Bar on and off.

Show Numeric Bar: Toggles the Numeric Bar on and off.

Show Hint Line: Toggles the Hint Line on and off.

Show Rulers: Toggles the rulers on and off.

pop

WPG File Format

WPG is the file extension for the Word Perfect Graphics file format.

pop

XOR

As it applies to EXPRESS, the XOR function inverts the color of an object in relation to the background during freeform drawing and editing. This is done to ensure that the object being drawn or edited is visible against the background. In some special cases, however, the XOR process can make an object difficult to see against the background; in these cases, you can use the Drawing Options dialog box to set the tracing color.

Arrange Menu

Arrange

G roup	Ctrl+G
U nGroup	Shift+G
B ring to F ront	Ctrl+F
S end to B ack	Shift+F
S tacking O rder...	
A lign...	Ctrl+N
T ransform...	Ctrl+W
T ransform A gain	Shift+W
D uplicate	Ctrl+D
F lip V ertically	
F lip H orizontally	
M ake P roportional	

The Arrange menu contains commands for precision drawing and editing. Click on any command to display specific information about that command.

Draw Menu

Draw	
Clip-Art <u>M</u> anager...	Ctrl+M
<u>S</u> ymbol...	Ctrl+S
<u>T</u> ext...	Ctrl+T
Shapes	▶
<u>C</u> hart...	
Activity <u>M</u> anager...	
<hr/>	
<u>L</u> ine	F2
<u>C</u> urve	F3
Trace <u>B</u> itmap	
Cvt to <u>F</u> reeform	F8
<u>E</u> dit Freeform	Ctrl+P
<hr/>	
<u>C</u> onstruct	▶
<u>S</u> nap	▶
Set Start/End <u>P</u> oint	
Reverse Points Order	
Shape <u>I</u> ntro...	
<hr/>	
<u>O</u> ptions...	

The Draw menu contains commands for placing art forms, clip art, and text in the drawing area and for drawing lines. Click on any command to display specific information about that command.

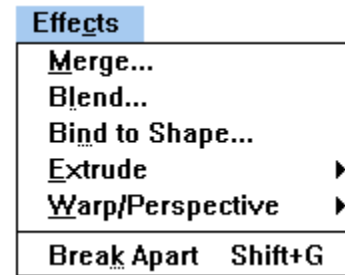
Edit Menu

Edit

<u>U</u> ndelete	Ctrl+Z
B lock Select	Ctrl+B
S <u>e</u> lect A ll	Ctrl+A
<u>D</u> eselect All	Shift+A
S <u>e</u> lect Area	
O bject Management	▶
<u>C</u> ut	Ctrl+X
<u>C</u> opy	Ctrl+C
C opy Area	
<u>P</u> aste	Ctrl+V
P aste <u>O</u> ptions	▶
C lipboard...	
<u>C</u> lear	Del

The Edit menu contains commands for selecting and deleting objects, for undoing and undeleting, and for transferring objects to and from the clipboard. Click on any command to display specific information about that command.

Effects Menu



The Effects menu contains commands for sizing, positioning, and duplicating objects. Click on any command to display specific information about that command.

File Menu

<u>F</u>ile
<u>N</u>ew <u>O</u>pen...
S<u>a</u>ve <u>A</u>s... <u>S</u>ave F9
<u>D</u>efaults ▶
P<u>a</u>ge <u>S</u>etup... P<u>r</u>int <u>S</u>etup... <u>P</u>rint...
<u>I</u>mport... <u>E</u>xport...
<u>E</u>xit

The File menu contains commands for opening, saving, and printing documents. Click on any command to display specific information about that command.

Help Menu

H elp	
Table of <u>C</u> ontents...	
Help for <u>I</u> tems	F1
<u>S</u> earch for Help on...	
<u>H</u> ow to Use Help...	
<u>T</u> utorials...	
<u>U</u> ser Guide...	
<u>T</u> ips & Techniques...	
EXPRESS Art Show	
<u>A</u> bout Arts & Letters® EXPRESS...	

The Help menu contains commands for accessing the on-screen help system, and for displaying an EXPRESS information screen. Click on any command to display specific information about that command.

Styles Menu

Styles	
C olor	▶
F ill	▶
L ine	▶
T ype	▶
S ty l e B undles	▶
S ave/ R ecall	▶

The Styles menu contains commands for changing the color, lines, fill, and type style of objects. Click on any command to display specific information about that command.

View Menu

View	
<u>A</u> ctual Size	Ctrl+1
√ <u>C</u> urrent <u>P</u> age	Ctrl+2
<u>A</u> ll <u>P</u> ages	Ctrl+3
<u>Z</u> oom In	Ctrl+0
<u>S</u> ave/Recall	▶
<u>F</u> ull <u>S</u> creen	Ctrl+7
<u>R</u> edisplay View	F12
<u>A</u> ccel- <u>O</u> - <u>D</u> raw	F11
<u>P</u> oint Display	▶
<u>Q</u> uick Display	▶
<u>W</u> ork Areas	▶
<u>O</u> ptions...	

The View menu contains commands for changing the way in which a document is displayed and for controlling the appearance of the EXPRESS interface. Click on any command to display specific information about that command.

Help Table of Contents

Select a topic below.



Read First



Interface



Menus



**Content
Button**



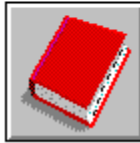
Tutorials



Tools




Commands



Glossary

Help Table of Contents

To display the Help Table of Contents, pull down the Help menu and click on **Contents** or click on the Inquiry button  in the bottom left corner of the EXPRESS screen.



Read First



Interface



Menus



**Content
Button**



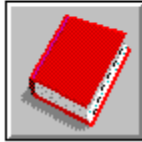
Tutorials



Tools



Commands



Glossary

From the Table of Contents, you can proceed to any of the eight primary topics or click on the **Search** button to display a keyword search facility.

If You Need Help

If you need Help, look first at the [Hint Line](#) at the bottom of the EXPRESS screen. As you move the cursor around on the screen, the Hint line identifies the various components of the interface and lists options for actions, where appropriate. When the cursor is in the drawing area, the hint line will change when you select an item.

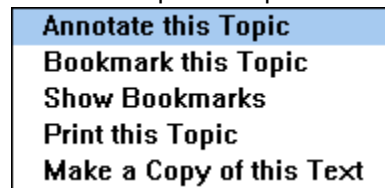
First-time users should select the EXPRESS Screen topic in the Help Contents screen for a quick tour of the interface. When you see the pointer hand, you have found a hotspot for information.

For detailed information about any aspect of the EXPRESS interface, press F1 to display the Help cursor. Using the Help cursor, click on the item for which you need help or pull down a menu and select a command.

For help on a specific item, pull down the Help menu and click on "Search for Help On." Type in a subject or keyword and then click on Go To.

When in Help, you can click on any of the blue highlighted words for an instant definition. To return to the last topic, click on the Back button. To return to a topic you had recently investigated in the Help system, click on History to display a list of the last 40 topics you have used. You can return to the Table of Contents by clicking on the Contents button.

Note that you can browse through groups of help topics by pulling down the "What's New" menu and choosing Browse EXPRESS Help. And while using Help you can click the Content menu (right mouse) button to display a list of functions that allow you to add your own comments to the Help screens, bookmark topics and print them.



Should you encounter any problems or require assistance, please review the following topics before requesting technical support.

-  **Common Problems**
-  **Unresolvable Problems**

Accelerator Keys Listed

EXPRESS accelerator keys have been changed to conform to Windows conventions, although you can change them back to the old key assignments if you choose.

Restoring old key assignments

Note that **Ctrl** or **Shift** or **Alt + Key** signifies holding down the first key while pressing the second.

<u>Action Desired</u>	<u>EXPRESS</u>	<u>Editor 3.12</u>
Accel-O-Draw	F11	
Actual Size view	Ctrl+1	Ctrl+1
Add (drawing) Handle	F5	F5
Align objects	Ctrl+N	Ctrl+N
All Pages view	Ctrl+3	Ctrl+3
Block Select	Ctrl+B	Ctrl+B
Break group apart	Shift+G	Ctrl+U
Bring to Front	Ctrl+F	Ctrl+F
Browser	Ctrl+H or Backspace	Ctrl+H
Clear (Delete)	Del	Del
Clip-Art Manager. . .	Ctrl+M or Enter	Ctrl+C
Close/Exit	Alt+F4	Alt+F4
Control Points	Ctrl+4	Ctrl+4
Convert Line/Curve	F4	
Convert to Freeform	F8	F8
Copy the Object	Ctrl+C	Ctrl+Insert
Current Page View	Ctrl+2	Ctrl+2
Curve (add handle)	F5	F5
Curve (control pts)	Ctrl+4	
Curve (draw one)	F3	F3
Curve (edit one)	Ctrl+P	Ctrl+P
Curve (its styles)	Ctrl+L	Ctrl+L
Cut	Ctrl+X	Shift+Delete
Deselect All	Shift+A	
Duplicate	Ctrl+D	Ctrl+D
Erase	Del	Del
Fill (object's interior)	Ctrl+I or Tab	Ctrl+I
Freeform/Point Edit	Ctrl+P	Ctrl+P
Full Screen View	Ctrl+7	Ctrl+X
Group	Ctrl+G	Ctrl+G
Help for Items	F1	F1
Join Open Shapes	F7	F7
Line (add handle)	F5	F5
Line (draw one)	F2	F2
Line (edit one)	Ctrl+P	Ctrl+P
Line (its styles)	Ctrl+L	Ctrl+L
Lock/Hide/Name	Ctrl+H	Ctrl+H
Outlines Only View	Ctrl+6	Ctrl+6
Paste	Ctrl+V	Shift+Insert
Points (show)	Ctrl+5	Ctrl+5
Previous View	Shift+O	Ctrl+V
Recall Styles	Shift+R	Ctrl+R
Redisplay (redraw)	F12	
Save (the document)	F9	F9
Save Object's Styles	Ctrl+R	Ctrl+Q

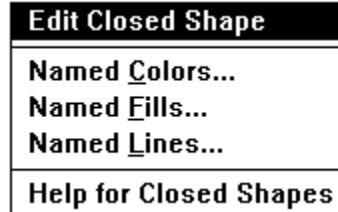
Select All	Ctrl+A	Ctrl+A
Send to Back	Shift+F	Ctrl+K
Show Control Points	Ctrl+4	Ctrl+4
Split	F6	F6
Switch To	Ctrl+Esc	Ctrl+Esc
Symbols (65 basic)	Ctrl+S	Ctrl+S
Text (entering)	Ctrl+T	Ctrl+T
Transform	Ctrl+W	Ctrl+W
Transform Again	Shift+W	Ctrl+O
Type (styles)	Ctrl+Y	Ctrl+Y
Undelete/Undo	Ctrl+Z	Alt+Bkspace
UnGroup	Shift+G	Ctrl+U
Zoom In	Ctrl+O	Ctrl+Z

cont

Content Menu Button

The Content menu button is the right, or secondary, button on your mouse. Use it to display a popup menu by pressing and holding it while an object is selected. You can also display Content menus for the six style buttons in the button bar at the top of the screen. Place the Pointer cursor over the menu button and press and hold the Content menu button to display the Content menu.

- | | |
|---|--|
|  Color Style |  Type Style |
|  Fill Style |  Custom Style |
|  Line Style |  Eyedropper |



Using the Content menu button to quickly access Content menus is one of the best ways to increase productivity. Practice pressing and holding the Content menu button while pointing on an object that you wish to modify. This method offers the most direct access to EXPRESS functions or dialog boxes appropriate for editing the selected object.

-  **List of Content Menu Button Assignments**

Content Menu Button Assignments

<u>Menu Item</u>	<u>Single Click Right Button</u>	<u>Click and Hold Right Button</u>
<u>Open</u>	<u>Import dialog box</u>	<u>Open Options menu</u>
<u>Save</u>	<u>Export dialog box</u>	<u>Save Options menu</u>
<u>Palette</u>	<u>Custom color dialog box</u>	<u>Color styles menu</u>
<u>Fill</u>	<u>Custom fill dialog box</u>	<u>Fill styles menu</u>
<u>Lines</u>	<u>Custom lines dialog box</u>	<u>Line styles menu</u>
<u>Type</u>	<u>Type styles dialog box</u>	<u>Type styles menu</u>
<u>Styles</u>	<u>Custom styles dialog box</u>	<u>Custom styles menu</u>
<u>Eyedropper</u>	<u>Save/Recall styles menu</u>	<u>Save/Recall styles menu</u>
<u>Object List Window</u>	<u>Object Browser dialog box</u>	<u>Object Management menu</u>
<u>Style or Numeric Bar</u>	<u>Show or conceal Toolbox, Bars</u>	<u>Show or conceal Toolbox, Bars</u>
<u>Control Points</u>	<u>Toggles Control Points on/off</u>	<u>Point display option menu</u>
<u>Snap Options</u>	<u>Construct menu</u>	<u>Construct menu</u>
<u>Accel-O-Draw</u>	<u>Redraws EXPRESS screen</u>	<u>Redraw Options menu</u>

BONUS CD and Font Manager

When you register your copy of Arts & Letters EXPRESS, you will receive the Arts & Letters Bonus CD containing 1,000 fonts in both PostScript and TrueType format plus hundreds of additional clip-art images. These fonts are of the highest quality with over 100 kerning pairs per font and as many as 400 pairs for some fonts.

Also included is the Arts & Letters Font Manager which provides the easiest and fastest way ever to install fonts under Windows.

One of the most important advantages of the Arts & Letters Font Manager is that you can preview fonts from any source before you install them on your system. The Font Manager searches your fixed-disk drive and compiles a "primary font database," in which fonts are presented using their full names in alphabetic order. When you insert the Bonus CD or any other CD or diskette containing fonts, the Font Manager will add the fonts by name to the "available" list and store the name of the diskette or CD in the event you ever want to install the font from the "available" list to the "primary font database". To install a font, you just select it from the "available" list and click on the right mouse button. Uninstalling, copying and deleting fonts is just as simple.

cont

Tips & Techniques

Once you have installed EXPRESS, leave the EXPRESS CD-ROM in your CD drive and click on Tips & Techniques to display a button bar of helpful suggestions that will improve your productivity and save you money. The list of Tips & Techniques is presented below.

- Accel-o-Draw
- Activity Manager
- Adding Text
- Arrowheads
- Color Filters
- Color Palettes
- File Management
- Help for Items
- Make Proportional
- Naming Objects
- Object Management
- Precise Adjustments
- Pushpins
- Quick Display Options
- Right Mouse Button
- Resizing Objects
- Save, Save, Save
- Size & Move
- Stacking Order
- Use Both Hands
- 4-Color Check List

EXPRESS Art Show

Once you have installed EXPRESS, leave the EXPRESS CD-ROM in the drive and click on EXPRESS Art Show to start a narrated, self-running exhibit of artwork created in EXPRESS.

Intended primarily for individuals who are not familiar with the capabilities of Arts & Letters EXPRESS, the Art Show presents many interesting works that demonstrate how you can use EXPRESS to create a wide range of artwork -- from eight-foot murals to greeting cards. Artists from all corners of the world are represented.

If you have used Arts & Letters to produce artwork that you would like to share with others, please send the files and a letter of permission so we can include your work in future editions of the Art Show.

Send submissions to:

Art Show Coordinator
Computer Support Corporation
15926 Midway Road
Dallas, Texas 75244
USA

cont

Features of EXPRESS

Click on a topic below for information about the EXPRESS feature. Click on the Back button to return to this list.

- Accel-O-Draw**
- Activities**
- Activity Manager**
- Adding & Editing Text in the Drawing Area**
- Browser**
- Clip-Art Manager with Find Feature**
- Color & Brightness/Contrast Filters**
- Content Menu Button**
- Defining Fills**
- Drag & Drop**
- Drawing Curves**
- Extrude**
- Flyout Toolbars & Foldup Menus**
- Gradient Fills**
- Greeting Cards**
- Help**
- Importing Files**
- Interactive Kerning**
- Intuitive Object Selection**
- Mixing Colors**
- Modifying Objects**
- Moving Objects**
- Numeric Bar**
- OLE (Object Linking & Embedding)**
- Printing Operations**
- Private INI file**
- Process Color (4-color) Separations**
- Proportional Sizing from the Center of Objects**
- Pushpins**
- Selection within a Grouped Object**
- Selecting Objects**
- Selecting Point Handles**
- Sizing Objects**
- Spot Color Separations**
- Stationery & Bulletins**
- Symbols**
- Thumbnail Images**
- Undercolor Removal**
- Warp/Perspective Commands**

Browsing EXPRESS Commands

The on-line Help for EXPRESS defines and illustrates dozens of commands. Use the <<Page and Page>> buttons to browse alphabetically through the commands. When you are at the beginning or end of a browse group*, the respective button will be disabled or turn gray. To choose another browse group, pull down the What's New Menu and choose Help Browser. Another menu will appear displaying additional browse groups.

* A browse "group" is a collection of terms, commands, tools, etc. that are related according to function, definition, or content. For example, the browse group "Commands" allows you to browse all EXPRESS commands. You can access the browse groups when you choose Help Browser from the What's New menu.


About Arts & Letters EXPRESS

The About Arts & Letters EXPRESS command in the Help menu displays a dialog box containing title, copyright, version, serial number, and other information about your copy of EXPRESS.


The About box also reports the number of objects in the document currently open in EXPRESS.

comm

Accel-O-Draw (F11)

The Accel-O-Draw command in the View menu (or the button  at the top right) temporarily turns off [multitasking](#) in EXPRESS in order to permit a faster screen redraw. You cannot perform other tasks until redrawing has finished.

If you want a quicker screen redraw and it is not necessary to view the completed drawing at once, hold down the content menu button on the Accel-O-Draw button and drag the cursor to the quick display options. If you need to see your work redrawn at each stage, use Accel-O-Draw. It will cause the drawing to be completed anywhere from 10% to 300% faster, with an average improvement of probably 50%.

Holding down the content menu button on  will display a menu showing other options to speed screen redraw.

If you wish to interrupt Accel-O-Draw and return to a multitasking capability, press Esc.


 **Speeding Screen Redraw with Quick Display Options**

Activity Manager

The Activity Manager command in the Draw menu accesses the Activity Manager dialog box.

Use the Activity Manager to access activities, templates, sample files and other EXPRESS accessories.

Notice that the Activity Manager is similar to the Clip-Art Manager.

 **See also: Using the Activity Manager**

 **See: List of Activities**

Actual Size (Ctrl+1)



The Actual Size command in the View menu, or the tool in the Views flyout, displays a portion of the current page. Objects are displayed at approximately the same size they will appear when printed.

After selecting Actual Size, you can press Shift+O to return to the previous view.

 **Current Page**

Add Handle (F5)



The Add Handle command under Construct in the Draw menu, or the tool in the toolbox, displays the Add Handle cursor.

During freeform editing, point the Add Handle cursor on a line or curve and click the mouse to add a point handle at that location. Cancel Add Handle by clicking the content menu button once.

comm

Align (Ctrl+N)



The Align command in the Arrange menu or the tool in the Effects flyout displays the Align dialog box. Use this dialog box to align selected objects relative to each other (Objects reference) or to the page borders (Page reference).

Any clip-art symbol that has been ungrouped and modified (but not freeformed) can be restored with the Assemble Logically option. For example, you can break apart the Great Blue Heron (in the Nature-Birds Clip-Art Collection) to recolor its legs and crest (symbol 6622) then group this part with the body (symbol 5960) after selecting both parts.

When aligning words, check the Use Text Baselines option to align the baselines of the words.

The Align Dialog Box

Grouping Objects

Selecting Objects

Align Points Horizontally

Clicking on Align Points Horiz under Construct in the Draw menu or the tool




in the Construct flyout



allows the horizontal alignment of selected points.

First convert the object to freeform then select the points that need alignment. Click on Align Points Horiz and use the cursor to click on the selected points. The selected points will jump to the line.

 **See also: Aligning Points Vertically**

 **See also: Convert Objects to Freeform**

 **See also: Select**

Align Points Vertically

Clicking on Align Points Vert under Construct in the Draw menu or the tool



in the Construct flyout



allows the horizontal alignment of selected points.

First convert the object to freeform then select the points that need alignment. Click on the align Points Vert command and use the cursor to click on the selected points. These points will jump to the line.



See also: Aligning Points Horizontally



See also: Convert Objects to Freeform



See also: Select

All Pages (Ctrl+3)



The All Pages command in the View menu (or the icon in the Toolbox) displays all the pages of the current document. While the All Pages view is useful for seeing the full extent of your file, objects on individual pages will appear small and may be difficult to manipulate at this level.

After selecting All Pages, you can press Shift+O to return to the previous view.

Better Gradients

The Better Gradients command (under Quick Display, Gradients, in the View menu) causes gradient fills to be displayed with greater accuracy and less speed on the screen.

This command affects the screen display only.

comm

Bind to Shape

The Bind to Shape command in the Effects menu or the third button in the toolbox flyout displays the Bind to Shape dialog box. From there you execute the command.



Note: Before using this command, ensure that the shape to which the text will be bound has been converted to freeform. If not, select the shape and press F8. Do NOT convert the text to freeform. Next, you should have both objects selected then execute the command.

The Placement options let you specify where the text is placed on the shape.


To edit text that has been bound to a shape:

1. Select the Text-along-shape object and choose the Text command (to add or edit the words), or choose Type in the Styles menu (to change typeface, size, spacing, etc.)
2. Edit the shape by holding down the content menu button releasing it on the Edit Open Shape command. (You do not have to break apart the object to edit it.)
3. If desired, you can make the text a group of individual letters and then edit each one. The letters remain in place on the shape. Do this by selecting the Text-along-shape object and pressing F8.
4. If you have not converted the Text-along-shape object to freeform, you can press Shift+G to separate the text from the shape.

Note: The Shapes toolbox flyout



offers a useful arc (the lower right shape) for binding text.

 **The Bind to Shape Dialog Box**

Bitmap Smoothing


The Bitmaps/Smoothing command (under Quick Display in the View menu) toggles the smoothing of bitmaps on and off. When bitmap smoothing is turned on, rough edges on bitmaps are smoothed. The amount of smoothing is a function of the type of bitmap image.

This command affects the screen display only.

 **Bitmap Pictures**

comm

Blend


The Blend command in the Effects menu or the second button in the toolbox flyout  displays the Blend dialog box. Use this dialog box to blend a specified number of copies of a selected object between starting and ending positions and styles.


To blend copies of an object:

1. Select an object, then choose Blend from the Effects menu.
2. Enter the number of copies desired in the blend.
3. If desired, choose to blend the color or position of the object using a logarithmic or reverse-logarithmic scale. A logarithmic scale bunches the transitions of the blend at one end.
4. Choose to add the transitional copies of the object in front of or behind the original.
5. If you want to rotate the objects in the blend, choose which direction you want them rotated -- clockwise or counterclockwise.
6. Click on Add. The cursor changes to the Blend cursor. Blend creates a copy of the selected object. This copy is the final copy in the sequence.
7. You can now choose other tools to position, color, rotate and otherwise modify this copy.
8. Choose Complete Blend or click the content menu button to complete the blend.

If you wish to modify the blend while preserving it as a blend, choose Blend from the Effects menu, alter the items in steps 2-5, and click on Replace.

If you want to edit a Blend, select it and press Shift+G. (Doing so breaks apart the blend into a collection of shapes.)

 **The Blend Dialog Box**





 **Selecting Objects**

Block Select (Ctrl+B)

The Block Select command in the Edit menu or the Block Select tool in the toolbox displays the Block Select cursor.

Use this cursor to drag a box around all objects you want to select. A single set of handles appears around the selected objects, and you can manipulate the objects as a temporary group.

During freeform editing, you can use Block Select to select multiple point handles.

-  **Selecting Objects One by One**
-  **Selecting All the Objects in Your Document**
-  **Making a Group of Selected Objects**
-  **Selecting One Object Within a Group**

Bring to Front (Ctrl+F)

The Bring to Front command in the Arrange Menu moves a selected object to the front of all other objects on the drawing area.

Using the Bring to Front and Send to Back commands, you can overlap and layer objects.

 **Paste in Front**

 **Send to Back**


comm

Cancel (Esc)

A command button found in most dialog boxes, used to cancel the operation you are performing. When you click on the Cancel button, the dialog box disappears and the screen remains unchanged. Pressing Esc also cancels many operations.

comm

Chart

The Chart command in the Draw menu (or the last icon in the Objects/Libraries flyout in the Toolbox ) displays the Chart window. Use the Chart window to create and edit charts.

The Chart window contains a menu bar containing File, Edit, Gallery, and Elements menus.

If a chart is selected when the Chart command is chosen, the chart data appears in the data fields.

Otherwise, the data fields are blank.

Enter or edit data as desired. Click on a data field to highlight it, then type the desired data. When done entering data, press Enter or click on another data field.

Use the File menu to import and export chart data in text, [DIF](#), or [SYLK](#) format. Before importing, select a data cell to mark the top left cell for the imported data. Before exporting, [drag](#) the cursor in the Chart window to select the data range to export.

Use the Gallery menu to select the [chart type](#) desired.

Use the Elements menu to add and edit chart elements and chart attributes.

Use the Edit menu to modify and edit the chart data grid.

When done, click on Add to create a new chart, or on Replace to replace a currently-selected chart. The Add Object cursor appears; place it where you want the upper left of the chart to appear. Click the mouse to have the chart appear at its default size, or [drag](#) the mouse to size a [bounding box](#) for the chart.

 **Chart Elements**

 **Chart Attributes**

 **Chart Data Grid**

Clear/Delete (Del)

The Clear command deletes selected objects or segments.

Object editing: Clear deletes all selected objects from the document.

Freeform drawing: Clear deletes the last segment drawn.

Freeform editing: Clear deletes a selected segment or contiguous selected segments. A dialog box allows you to specify Points deletion (the segments are deleted and replaced by a single segment) or Sections deletion (the segments are deleted and not replaced).

comm

Clipboard

The Clipboard command in the Edit menu displays the Clipboard dialog box. Use this dialog box to specify the desired cut, copy, and paste formats; set the resolution for Metafiles; view the contents of the [Windows Clipboard](#); and clear the contents of the Clipboard.


If you are cutting and pasting between EXPRESS documents, choose A&L as the Cut and Paste format. This format preserves all Arts & Letters graphic information.

 **See also: Edit Menu**

 **See also: Cut, Copy, and Paste Formats**

Color

The Color command in the Style menu displays the Color submenu. The default submenu command is the Custom Color dialog box. There are several convenient ways to apply color in EXPRESS to a selected object.







An easy way is to click with the left mouse button on the Color style button . A ready-made color palette drops down to allow you to color the object's line or interior fill. If the colors shown are not sufficient, you can click on Custom to mix your own.

Another way is to hold down the content menu button after selecting an object. This action displays a list of options to choose from.

Also, choosing Color in the Styles menu will display the color palette and custom mixing button.

Editing shortcut: After selecting an object, give a sustained press of the content menu button anywhere on your work area and you will see a content menu similar to the following one. Still pressing on the Content menu button, scroll to the command you want.



-  **The Custom Color Dialog Box**
-  **How to Mix Colors**
-  **Naming Mixed Colors for Future Sessions**
-  **Color Filters**
-  **See also: Selecting Objects**
-  **See also: Styles Menu**

Construct

The Construct command in the Draw Menu displays the Construct submenu. The Construct commands are useful for editing simple and complex freeform objects. (Click on the Back button to return to this list.)

- Convert Line to Curve, Curve to Line**
- Add Freeform Edit Handle**
- Split an Object into Several Objects**
- Make Control Points or Endpoints Horizontal/Vertical**
- Align Freeform Points Horizontally**
- Align Freeform Points Vertically**
- Make Joins Smooth**
- Join Open Shapes**
- Save Values (Angle)**
- Save Values (Length)**
- Save Values (for X)**
- Save Values (for Y)**
- Recall Values (Angle)**
- Recall Values (Perpendicular)**
- Recall Values (Length)**
- Recall Values (for X)**
- Recall Values (for Y)**
- Specify Freeform Values**
- Maintain Smooth Joins**
- Maintain Curve Slope**

Control Points (Ctrl+4)

The Control Points command is found in the Display Points submenu (see the View menu).

Control Points are the points at either end of a tangent at a selected Freeform Point. The Control Points command [toggles](#) the display of curve control point handles on and off.

Note: An object must be converted to freeform (by pressing F8) and a control handle must be selected (the small open box becomes black).

When this is done the control point handles are displayed. You can then drag the control point handles to adjust the slope of curve at that tangent.

You can toggle between the control points also by clicking on the Points Display button on the button bar.



Shows freeform points on a line, curve, or open shape during freeform edit mode



Shows control points on a line, curve, or open shape during freeform edit mode



Shows control points on a line, curve, or open shape



Turns off display control points in a selected object



Freeform and Control Points

Convert to Freeform (F8)

In order to edit the shape of a symbol, you must first convert it to a freeform object using the Cvt to Freeform command in the Draw menu.

Select the symbol you want to edit. Press F8. Freeform points appear around the object if it is editable.

Grouped objects (for example, some warp objects) must first be ungrouped before their parts can be converted to freeform.

 **See also: Freeform Points**

comm

Copy (Ctrl+C)


The Copy command places a copy of all selected objects into the Windows Clipboard.

The objects can then be pasted from the Windows Clipboard into other currently-running applications such as spreadsheets, desktop publishing, or word processors. Press Alt+Tab to temporarily leave EXPRESS, place the cursor where you want the illustration to appear, then press Ctrl+V or Shift+Insert (depending on the application) to place the EXPRESS illustration.

 **See also: Clipboard Formats**

comm

Current Page (Ctrl+2)


When you choose Current Page in the View menu (or the icon  in the Toolbox), EXPRESS displays the last page on which you have added clip art, drawn a line or curve, or selected an object. Selecting an [object](#) on a page makes that page the current page -- a choice which also applies when printing the current page.

After selecting Current Page, you can press Shift+O to return to the previous view.

 **See also: Select**


Curve/Draw (F3)


The Curve command in the Draw menu displays the Curve cursor. To draw a curve on the drawing area,

select **Curve** from the Draw menu, press **F3**, or click on the Curve tool  in the Toolbox.


When the Curve draw cursor appears, press down with the inside mouse button and drag out a curve.

When you release the mouse, a handle appears at the stopping point. You can continue by drawing

another curve, or you can continue with a line by clicking on .

 **Adjusting Smoothness of Curves**

 **Using the Line and Curve Draw Tools**

 **See also: Tools and Style Buttons**

Cut (Ctrl+X)

The Cut command removes all selected objects from the document and places them in the [Windows Clipboard](#).

The objects can then be pasted from the Windows Clipboard into other currently-running applications such as spreadsheets, desk top publishing, or word processors. Press Alt+Tab to temporarily leave EXPRESS, place the cursor where you want the illustration to appear, then press Ctrl+V or Shift+Insert (depending on the application) to place the EXPRESS illustration.

 **See also: Clipboard Formats**

Cvt Line <> Curve (F4)

The Cvt Line <-> Curve command (under Construct in the Draw menu) changes a line segment to a curve segment or a curve segment to a line segment.


Select the two adjacent point handles of the desired segment, then choose Cvt Line <> Curve or press F4.

 **See also: Selecting Point Handles**

comm

Delete Points/Delete Segments

This command deletes points or segments. The points or segments must be contiguous.

 **Selecting Objects**

comm

Deselect All (Shift+A)

The Deselect All command deselects all selected objects in a document. Clicking on an empty area of your screen also deselects all objects.

comm

Drawing Options

The Options command in the Draw menu displays the Drawing Options dialog box. Use this dialog box to set various sketching and tracing parameters, the number of undo levels, and the join options for joining two open shapes.

The Curve Sketching parameters are:

- | | |
|--------------------------|--|
| Accuracy | When a sketched curve is translated into Bezier segments, the segments will match the sketch within the Accuracy parameter. |
| Faster/Better | When a sketched curve is translated into Bezier segments, Better takes more time to calculate the optimum segments. This is needed only when a very precise translation is required. |
| Detect Corners | When a sketched curve is translated into Bezier segments, any corners greater than the smooth join angle (described below) will not be smoothed if Detect Corners is on. |
| Complex Curves | When a sketched curve is translated into Bezier segments, only one Bezier segment will be created if Complex Curves is off. |
| Smooth Join Angle | When you draw a curve from the end of a line or curve, the join will be made tangent (smooth) if the two meet within the smooth join angle. The smooth join angle also determines smooth joins when a sketched curve is translated into Bezier segments (see Detect Corners, above). |

The Bitmap Tracing parameters are:

- | | |
|-------------------------------|--|
| Accuracy | When a bitmap is traced, the trace will match the outline of the bitmap within the accuracy parameter. |
| Faster/Better | Traces the bitmap more quickly, or takes extra time to calculate the optimum number of segments for the trace. |
| More Lines/More Curves | Lets you adjust a trace to achieve the desired effect by specifying the optimum ratio of |

	lines to curves in the trace.
Lines Only	You can choose to have a trace be composed of line segments only, or both line and curve segments.
Smooth Join Angle	When a trace is created, lines and curves will be tangent (smooth) if they meet within the smooth join angle.
Sketching Color	Normally used when manually tracing a bitmap. You can set a sketching color that will contrast with the bitmap and therefore be easier to see while drawing.

The Join Open Shapes preferences are:

Move Objects Together	Moves the two objects so that the closest endpoints on the two join.
Move Endpoints Together	Moves the two closest endpoints together to join the objects.
Join Only If Overlapped	Joins the two objects only if an endpoint of one object is on top of an endpoint of the other object.

The Sketching Color field offers three colors for displaying the currently edited or drawn freeform object in order to distinguish it from other objects on your screen.


The Number of Undo Levels determines how many previous freeform operations can be undone; for example, a level of 9 means that you can undo the last 9 freeform operations. The greater the number, though, the more memory is required to store the undo information.

Duplicate (Ctrl+D)

The Duplicate command in the Arrange menu displays the duplicate cursor.

Move or size objects using the duplicate cursor to create duplicates at the new position or size.

 **See also: Move**

 **See also: Size**

Exit (Alt+F4)

The Exit command closes EXPRESS.

When you choose the Exit command, you are prompted, "Save changes to (untitled)?" You can choose Yes to save the current drawing, No to leave EXPRESS without saving the drawing, or Cancel to continue the current session.

 **See also: Save**

comm

Export

The Export command lets you export any image created in EXPRESS in any of the following formats -- [EPS](#), [CGM](#), [TIFF](#), [SCODL \(SCD\)](#), [WMF](#), [WPG](#), or [BMP](#).

To export an image, choose the destination directory for the object(s) in the drawing area to be exported.

The Setup button lets you specify a resolution at which a file should be exported or the resolution and type of screen representation (in the case of EPS files, for example). You can specify 150 dpi, 300 dpi, or a custom resolution. Note that the larger the value, the larger the file size of the image exported.

Choose a file format. Note that the file format extension appears by the filename box. Enter the filename and click on **OK**.

EXPRESS Decipher Utilities

Supported export file formats and features:

File Type	Clipping Mask	Gradient Fills	Wide/Styled Lines	Bitmap Image Data
BMP (Bitmap)	Y	Y	Y	Y
EPS (Vector)	Y	Y	Y	Y
CGM (Vector)	N	N	Y	N
TIF (Bitmap)	Y	Y	Y	Y
SCODL	Y	Y	Y	Y
WMF (Vector)	N	N	Y	N
WPG	N	N	Y	N


Extrude


EXPRESS' Extrude command lets you quickly create three dimensional effects using freeformed clip-art or text objects.

Note: The best results are achieved when you extrude text or simple objects without "detail lines" overlapping filled areas. Also, since Extrude converts flat 2D objects into 3D artwork, you should not try to extrude artwork that already depicts a 3D view, such as a cube or the perspective view of an airplane.

To extrude an object:


1. Select the object.
2. All objects to be extruded must be closed freeform shapes. Press **F8** to convert the selected object to freeform. The window in the Style bar may indicate that the object is now a group. In that case, break apart the group by pressing **Shift+G** and repeat the process for one of the selected elements of the former group.
3. Pull down the Effects menu and click on Extrude or hold down the left mouse button on the Effects tool

 to display the Effects flyout


 and choose the Extrude icon (fourth)

The Extrude dialog box appears, displaying an extruded box ready to receive changes. This box has handles which are a 3D version of [object handles](#), and they allow you to adjust the extrusion in the same way.


Extrude can be used in either perspective or trackball mode. (See Specifying Extrude Values below.)

4. You can drag (1) the corner point handles on the extrusion, (2) a side segment, or (3) the vanishing point to adjust the extrusion. You can also hold down the mouse button while pointing on the face of the extrusion and move the face.
5. When the object is extruded as desired, click on **Done**. The name " Extrusion" appears in the Style bar.

Note: Holding down **Shift** when dragging any selectable part of the extrusion allows you to move the extrusion around on your screen.

 **The Extrude Dialog Box**

 **Editing Extruded Objects**

 **Specifying Extrude Values**

Extrude Add/Edit

To edit an extruded object or add an extrusion:

1. Select the object.
2. From the Effects menu, choose Extrude and select Add/Edit from the menu item flyout.

 **See Extrude**

Extrude (Remove)

The Remove command lets you remove any extrusion to an object.

To remove an extrusion:

1. Select the object.
2. From the Effects menu, choose Extrude and select Remove from the menu item flyout.

This is the only place the Remove command is executed.

 **See also: Extrude**

Face

The Face Command in the Type submenu displays the Typefaces dialog box. From this dialog box you can choose a font (typeface), see a sample, choose the font source, and apply your selection to any selected text object.

Note: If you have freeformed a text object, the typeface is no longer linked to the Typeface dialog box.

 **See The Typeface Dialog Box**

Faster Gradients

The Faster Gradients command (under Quick Display, Gradients, in the View menu) causes gradient fills to be displayed with greater speed and less accuracy on the screen.

This command affects the screen display only.

comm

Flip Horizontally

The Flip Horizontally command in the Arrange menu flips a selected object horizontally (produces a mirror image).

comm

Flip Vertically

The Flip Vertically command in the Arrange menu flips a selected object vertically (turns it upside down).


comm

FREE Gift for Your Friends

Do your friends a favor. If they have a computer with a CD-ROM and an interest in graphics, we would like to send them a FREE copy of the Arts & Letters Guided Tour CD-ROM. Included on the CD is a fully-functional drawing program with over 400 clip-art images, a test drive version of Arts & Letters EXPRESS and a Guided Tour of SpaceAGE, featured on CNN Future Watch and ranked as the #1 Space CD by CD-ROM World magazine. Also included are Guided Tours of two of the Arts & Letters DRAW Series; WarBirds and Dinosaurs.

comm

Freeform Points (Ctrl+5)

Freeform Points and Control Points are handles whereby an object can be edited. They appear only on freeform objects. To convert an object to freeform, select it and press F8. (Or, either click on  in the Toolbox or choose Edit Drawing from the Draw menu). When you draw a freehand curve, Freeform Points automatically appear on the curve.


More Freeform Points can be added by pressing F5 (see Add Handle). The slope of the tangent at a selected Freeform Point can be modified after pressing Ctrl+4 by manipulating one of the two resulting Control Points.

 **Sample Editing Session Using Control Points**

Freeform/Text Edit (Ctrl+P)

The Freeform/Text Edit command in the Draw menu lets you change a selected freeform shape or manipulate a text object. This command is also accessible from the toolbox. Use the Hint Line to identify the tool. (Scroll down or use the page down key to see Text Point Editing.)

Freeform Shapes

Select a freeform drawing and choose Freeform/Text Edit from the Draw menu, or click on the  icon in the Toolbox. Freeform point handles are on the object's lines. (If the handles do not appear, it is not a freeform object and so cannot be edited, although it can still be manipulated in other ways.) The triangular Edit cursor appears. You can drag the freeform point handles to reshape the object. The Control Points command in the View menu lets you display control point handles on curves, giving you even more ways to change your drawing. Choose the Control Points command to turn it on, then click on a point handle on a curve. Control points are displayed. Drag the curve control point handles to change the slope of curves.

Text Point Editing

If a text object is selected, the icon in the toolbox changes from Edit Freeform Shape to Edit Text Points. In this mode, you are editing individual characters within a text object.

To change the styles of individual characters within a text object:

1. Select the text object and select Freeform/Text Edit from the Draw menu, or depress the Content menu button and select Text Point Edit, or click on the Freeform Shape/Text Point Edit button in the Toolbox, or press Ctrl+P.

Small open squares -- character control points -- appear at the bottom left of each character, and two triangular spacing controls appear below and to the left and right of the text object.

2. The character control points can be selected individually, by Shift+click, or by the Block Select cursor (Ctrl+B). The selected control points fill, indicating that the characters they control can be given styles apart from the text object in which they appear. You can italicize words or letters, give them different fill and line styles, or change their typeface.

You can use this feature to adjust kerning (character fit) by selecting letters and moving them horizontally (either closer or farther apart). Press the Shift key and the movement of the selected characters will be constrained to either horizontal or vertical.

3. The triangular controls -- one pointing vertically, the other horizontally -- allow you to drag the text object and change its leading (vertical adjustment) and word and letter spacing (horizontal adjustment). Note that this is different from stretching a text object by dragging a center handle. These horizontal and vertical controls allow you to interactively change spacing, rather than by entering numbers in the Type Spacing dialog box.

When you have finished changing your drawing, click once on the right mouse button.

 **Modifying Objects in Express**

 **See also: Control Points**

 **See also: Freeform Points**

 **See also: Selecting Objects**

Full Screen (Ctrl+7)

The Full Screen command in the View menu removes the title, menu, and scroll bars from the screen. (You can remove the grid, page borders, Style bar and toolbox using the Options command in the View menu.)

This is useful when using a screen capture utility to capture an EXPRESS image.

Pressing Ctrl+7 again restores the title, menu, and scroll bars.

comm

Group (Ctrl+G)



The Group command in the Arrange menu or the tool in the Arrange flyout in the toolbox groups all selected objects together into a single object.

One set of handles appears around the objects, and EXPRESS treats them as a single object until they are ungrouped.


An individual object within a group can be edited without ungrouping by double-clicking on it. When you click outside the group, the changes made to it are applied, and the group remains intact.



UnGroup and Break Apart

Help Contents

The Help Table of Contents command in the Help menu displays a table of contents for EXPRESS Help. Click on a topic in the table of contents for further information.

The Inquiry button  in the lower left of your EXPRESS screen also displays the same table of contents. An inquiry button is present in many dialog boxes for immediate access to help for the items and functions associated with the dialog box.

Help for Items (F1)

The Help for Items command in the Help menu displays the Help cursor or you can press F1. Click on a command or tool and the Help window with the Help cursor to display information explaining the purpose and function of the selected item.

comm

Import

The Import command in the File menu lets you import clip-art images into EXPRESS from any of the following formats -- [TIFF](#), [WMF](#), [PIC](#), [PS](#), [EPS](#), [CGM](#), [DXF](#), [DRW](#), [CDR](#), [WPG](#), [BMP](#), or [DIB](#).



To import an image, select the file type desired. Choose the file desired from the list box and click on OK. The Add Object cursor appears. Click to add the image at its default size, or drag the mouse to size a [bounding box](#) for the image.

File Name: Lets you enter the filename to be imported. You can commence importing a file by double clicking on the file name in the scrolling list.

List Files of Type: Lets you choose the type of file to import.

Directories: Lets you choose the directory where the file is saved. Double click on a folder to open it or close it. Single click to select.

Drives: Lets you choose the drive where the file to import is saved.

OK, Cancel,  OK imports the files you selected in the File Name box, Cancel closes the Import dialog box without importing any files, and **** opens help to the appropriate topic.

Preview: Allows you to preview the thumbnails you saved with a GED file in the Save or Save As dialog boxes.

Text files (typically with the TXT or DOC extension) are created by word processors, text editors, and desktop publishing software. Text must be in ANSI or ASCII format to be imported into EXPRESS.

 **EXPRESS Decipher Utilities**

 **See also: Defaults**

Supported import file formats and features:

File Type	Clip Mask	Grad Fills	Wide Lines	Bitmap Images
TIF (Bitmap)	Y	Y	Y	Y
WMF (non-editable)	N	N	Y	N
WMF (Vector)	N	N	Y	N
PIC	N	N	N	N
PS	Y	Y	Y	Y
AI	Y	Y	Y	Y
EPS	Y	Y	Y	Y
CGM (Vector)	N	N	Y	N
CTM	N	N	Y	N
w	N	N	Y	N
DRW	N	N	Y	N
CDR	N	N	Y	N
WPG	N	N	Y	N

Installing Bonus Fonts

Click on this menu item to display information about the 1,000 Bonus fonts and hundreds of clip-art images you will receive on CD-ROM when you register your copy of EXPRESS. The Bonus fonts are supplied in both PostScript and TrueType format with the Arts & Letters Font Manager that allows you to preview the fonts before installing them on your system.

comm

Join Open Shapes (F7)



The Join Open Shapes command (under Construct in the Draw menu) lets you join two open shapes into a single object.

The two objects to be joined must be selected using [Shift+click](#) before choosing this command.


Specifying Drawing Options

comm


Line (F2)

You can select Line from the Draw menu or click on  in the Toolbox to draw straight lines. When the Line draw cursor appears, press down with the inside mouse button and drag out a line. When you release the mouse, a handle appears at the stopping point. You can continue by drawing another line, or you can continue with a curve by clicking on .

 **Using the Line and Curve Draw Tools**

 **See also: Tools and Style Buttons**

Line Styles (Ctrl+L)

The Line command in the Styles menu displays the Custom Lines dialog box. Clicking with the content menu button on the Line style button  shows it also.

Note: Holding down the Content menu button displays the content menu.

Use this dialog box to specify a line width, color, style, pattern, and arrowheads (if desired). All of these styles can be saved together under a name that will appear in the Named Lines list. If the document is saved, the line name will be saved with it.

Choose the Scale Width With Object option to have the width of the selected object's lines automatically increase and decrease as the object is sized.

If a dashed line pattern is specified, choose the Auto-adjust option to have EXPRESS automatically calculate the best fit for the selected pattern to the length and shape of the line.

Choose the Name button to name the current line styles. A dialog box appears; enter the name desired and click on Name. The name appears in the named lines list. To apply a named line to a selected object, select the name and click on OK. Any EXPRESS object can have its line styles modified.

If you are trying to achieve a special effect by applying arrowheads to a closed freeform object, note that they start and end at the same point handle. If you do not like where they appear, choose the Set Start/End Point command from the Draw menu, and use the resulting cursor to click on the desired point. A new handle can be added by pressing F5.

Click on Apply to apply the line styles to the lines of all selected objects.

Editing shortcut: After selecting an object, press and hold the content menu button anywhere on your work area and you will see a content menu similar to the following one. Still pressing on the Content menu button, scroll to the command you want.



The Custom Lines Dialog Box

Maintain Curve Slope

The Maintain Curve Slope command (under Construct in the Draw menu) toggles Maintain Curve Slope on and off.

When Maintain Curve Slope is on, curve [control points](#) can only be moved along the original tangent during editing. The tangent itself remains unchanged. When Maintain Curve Slope is off the tangent can be edited.

comm

Maintain Smooth Joins

The Maintain Smooth Joins command (under Construct in the Draw menu) toggles Maintain Smooth Joins on and off.

When Maintain Smooth Joins is on, smooth joins between lines and curves will remain tangent (smooth) during editing.

comm

Make Horiz/Vert

During freeform editing, the Make Horiz/Vert command (under Construct in the Draw menu) displays the point selection cursor.

Click the point selection cursor on a curve control point to make the control point horizontal or vertical in relation to its associated curve point.

Select the endpoints of a line segment using Block Select or Shift+click, then choose the Make Horiz/Vert command. Click the point selection cursor on one of the endpoints of the segment in order to move that segment to a horizontal or vertical position, depending on which it more nearly approaches.

 **See also: Control Points**

 **See also: Block Select**

comm

Make Join Smooth

The Make Join Smooth command (under Construct in the Draw menu) changes a corner join into a smooth join, or in other words, changes a cusp into a tangent at a given point.

During freeform editing, select a point:

- Between two curve segments,
- Between a line and curve segment, or
- At both endpoints of a line segment next to a curve segment.

Choose the Make Join Smooth command. The point selection cursor appears.

If you click on a freeform point between two curves, the curves are adjusted to make a smooth join. To adjust just one of the curve segments, click on the appropriate curve control point.

If you click on the point between a line and curve, or on the corresponding curve control point, the curve is adjusted to join smoothly with the line.

If you selected the two endpoints on a line, click on either endpoint. The line is adjusted to join smoothly with the adjoining curve.

See also: Freeform Points

See also: Control Points

Make Proportional

The Make Proportional command in the Arrange menu restores a clip-art symbol, text object, or freeform shape to its standard proportions if it has been sized non-proportionally.

comm

Merge

The Merge command in the Effects menu or the first tool in the Effects flyout



displays the Merge dialog box. With two or more freeform objects selected, Merge allows you to use the top object to cut a hole in the object(s) underneath it. This procedure is known as "hole cutting."

With any objects (freeform or otherwise) selected, Merge also allows you to use the top object as a "cookie cutter" to clip all the objects underneath it. This procedure creates a "clipping mask."



The Merge Dialog Box




Merging Objects in EXPRESS

New



The New command in the File menu or the button on the Style Bar clears the drawing area to let you start a new drawing.

When you choose the New command, you are prompted, "Save changes to (untitled)?" You can choose Yes to save the current drawing, No to clear the drawing area, or Cancel to keep the current picture on the drawing area.

 **See also: Save**

None (Fill)

You can specify no fill for the currently selected object(s) either by clicking on the None check box in the Custom Fill dialog box or by clicking on the None option in the Fill submenu.

comm

Object Cache (Clear)

The Object Cache command (under Quick Display in the View menu) lets you clear the contents of the cache.

When the object cache is on, warps, bitmaps (excluding 24-bit), and text on a path are stored in memory when created or edited. Whenever the screen is redrawn, these elements are drawn quickly from the memory cache instead of more slowly from the disk. If several objects are in the cache, they may use a significant amount of memory. Choose the Clear command to empty the cache.

comm

Object Cache (On/Off)



The Object Cache command (under Quick Display in the View menu) lets you toggle the object cache on and off.

When the object cache is on, warps, bitmaps (excluding 24-bit), and text on a path are stored in memory when created or edited. Whenever the screen is redrawn, these elements are drawn quickly from the memory cache instead of more slowly from the disk.

comm

Object Management / Browser (Ctrl+H or Backspace)

The Object Management command in the Edit menu displays a sub-menu for Browser, Lock, and Hide. A quicker way to access the Object Browser is to press the Backspace button on your keyboard when no other operation is in progress.

Using the Object Browser you can assign a name to an object, which appears in the Object Viewer field of Style bar when the object is selected. Use Lock and Hide (which are also accessible through Browser or from the toolbar as  and ) to make objects unselectable (locked) or unselectable and invisible (hidden).

Locking objects prevents them from being accidentally moved, sized, or otherwise altered. Hiding objects gets them temporarily "out of the way" while you work on other objects. Naming objects is a good way to distinguish between multiple, overlapping objects. You know which one is selected because its name is displayed in the Style bar. You can then select objects by name using the Browser if desired.

To lock, hide, or name an object, select the object and choose the Browser (Ctrl+H or Backspace). A dialog box appears, listing the names of all objects in the document. The name of the selected object is highlighted.

Click on Lock to lock the object, Hide to hide the object, or enter a name in the text box and click on Name to name the object. Lock and Hide icons are displayed beside names in the list box to show that they have been locked or hidden.

To deselect the current object, click on its name in the list. To select another object, click on its name. Click on multiple names to select additional objects. You can then lock, hide, or name all selected objects together.

To unlock or unhide an object, select its name in the list and click on Normal. To remove a name that has been given to an object, select the object in the list box, delete the name in the text box, then click on the Name button. The default name is restored.

Note: You don't have to use the Browser to name objects. You can simply click on the object's name in the Object Viewer field of the Style bar and type in a name. The new name will appear thereafter in the Browser.

Note: Double-click on objects indicated as Groups in the Browser. You will see branching lines indicating the inclusion of the just-displayed objects in the group. Now you can select these composite objects and lock/hide/name them without breaking apart the main group.

Explanation of Browser Icons

Open



The Open command in the File menu or the button on the Style Bar displays the Open dialog box. (If you forget to close your current work, don't worry: you will always be given a chance to save before proceeding.) Use this dialog box to open [GED](#) files.

Select the desired file from the filename list in the dialog box. To view other files, edit the Filename text box, entering the desired drive, directory, and filename specification. [Wildcard characters](#) can be used if desired.

As New Document: is checked, the chosen document replaces the current one on your EXPRESS screen.

As New Document: is **not** checked, the selected document will be added (at its default location and size) into the current document, merging the two. There are two ways to avoid losing merged objects among objects of the current document: group all of the objects in the currently open document and save the document before this operation; or check "Drag to Place," which allows you to size the merging document as if it were a piece of clip art.

After selecting the desired document, click on Open to load the document into EXPRESS. (The file must be a valid Arts & Letters document.)

Two new features added to the Open dialog box allow you to read a description of documents and/or see a thumbnail, or small sketch, of their contents (if the files were saved with these options). This will help in finding your work.



See Thumbnails



See also: The Open Dialog Box



See also: The Save Command

Outlines Only (Ctrl+6)

The Quick Display/Outlines Only command (under Quick Display in the View menu) toggles fills, wide lines, and bitmap display on and off.

When Outlines Only is on, objects are displayed as outlines only with no fills and no wide lines. Bitmaps are displayed as rectangles.

This speeds redrawing of objects, which can be useful when editing a complex illustration.

This command affects the screen display only, not the final printed result.

 **Using Accel-O-Draw to Speed Redraw**

Overprint

The Overprint command in the Fill and Line submenus helps compensate for misalignment (misregistration) of color separations.

A printer combines the separations created in EXPRESS to print all the colors of your composition. However, any printed piece may show a white, unprinted, gap at the boundaries of adjacent colors where the separations do not register perfectly. By slightly overprinting, these adjacent boundaries, the chance of this error occurring is reduced.

In EXPRESS, it is recommended that you overprint the lines of adjacent colored objects that might misregister during printing. The greater the thickness of the object's line, the greater the overprint. If a given object has no lines, you can specify a line and then give it the same color as the interior.

comm

Page Setup

The Page Setup command displays the Page Setup dialog box. Use this dialog box to set the page size and margins.

Click on Document Precision to set the logical units per inch that EXPRESS uses for its internal measurement system.

Choose a [page orientation](#) by clicking on the Tall (Portrait) or Wide (Landscape) buttons.

Choose a [page size](#) using any of three methods. Click on a page size in the Page list; enter a custom size in the size boxes; or click on Use Printer Page to automatically reset the page size to the maximum allowed by the currently-selected printer.

Choose [margins](#) by entering values in the Margin boxes, or click on Printer Minimums to automatically set the margins to the minimum allowed by the currently-selected printer.

 **See also: Document Precision**

Paste (Ctrl+V)

The Paste command places a copy of the contents of the [Windows Clipboard](#) into the EXPRESS document.

When you choose Paste, the Add Object cursor appears. Click the mouse to have the clipboard image appear at its default size, or drag the mouse to size a bounding box for the image.

The Clipboard Command

comm

Paste Behind

The Paste Options/Behind Object command designates that the contents of the [Windows clipboard](#) will be drawn in front of any currently-selected objects.

Select the desired objects that you want to paste behind. Choose Paste Options/Behind Object. The Add Object cursor appears. Click the mouse to have the clipboard image appear at its default size behind those objects, or drag the mouse to size a bounding box for the image.

comm

Paste in Front

The Paste Options/Front of Object command designates that the contents of the [Windows clipboard](#) will be drawn in front of any currently-selected objects.

Select the desired objects that you want to paste in front of. Choose Paste Options/Front of Object. The Add Object cursor appears. Click the mouse to have the clipboard image appear at its default size in front of those objects, or drag the mouse to size a bounding box for the image.

comm

Paste Options

The Paste Options command in the Edit menu allows you stack objects exactly as you wish in an EXPRESS document.


First choose the object that is to be inserted in front of or behind another object. Cut it (Ctrl+X) or copy it (Ctrl+C) to the Clipboard. Select the other object and click on Front of Object or Behind Object in the Paste Options flyout menu. Either click the left mouse button or drag to size the cut or copied object. Regardless of its spatial location, the object will be placed in the stacking order as you have chosen.

comm

Point Display


The Point Display command in the View menu displays a submenu with options to toggle the display of control points and freeform points on or off.

 **Control Points**

 **Freeform Points**

[comm](#)

Previous (Shift+O)

The Previous command (under Save/Recall) in the View menu (or the icon  in the Toolbox) displays the previous view. You can use this command repeatedly to display up to the last four previous views.

comm

Print



The Print command in the File menu or the button on the Style Bar allows you to print your EXPRESS file. First set up your printer by using the Print Setup dialog box. (See button below.)

Choose Print. Tell EXPRESS which part of the drawing you want to print by clicking on Current Page, All Pages, Selected Area, Selected Objects, or a specified range of pages. (EXPRESS counts pages from left to right, row by row.)

(To print a selected area, you must first define an area using the Select Area command in the Edit menu.)

Besides printing to the printer, you can print to a file. Doing so enables you to copy the print file to a disk, with which you can have a local [service bureau](#) print color copies of your file or image four-color separations from which a commercial printer can print color documents.



Print Setup



Printing to a File



Printing Colors



See also: Four Color Printing

Quick Display Bitmaps

The Bitmaps command (under Quick Display in the View menu) toggles the display of bitmaps on and off. When bitmaps are turned off, all bitmaps are displayed as shaded rectangles.

This command affects the screen display only.

 **See also: Bitmap Pictures**

comm

Quick Display/Show Colors as Gray

The Show Colors as Gray command (under Quick Display in the View menu) toggles the display of wide lines on and off.

When Show Colors as Gray is checked on, you see the effect of printing your color document in black and white.

This command affects the screen display only. To change the actual print colors to black and white, use the EXPRESS Color Filters command.

 **Color Filters**

comm

Quick Display/Show Fills

The Show Fills command (under Quick Display in the View menu) toggles the display of interior fills on and off.

This command affects the screen display only.

comm

Quick Display/Show Wide Lines

The Show Wide Lines command (under Quick Display in the View menu) toggles the display of wide lines on and off.

When Show Wide Lines is off, all lines are displayed as [hairlines](#).

This command affects the screen display only.

comm


Recall Values (Angle)

The Recall Values/Angle command (under Construct in the Draw menu) adjusts a line or curve segment or curve control point to the reference angle saved using the Save Values/Angle or Specify Values commands.

To use Recall Values/Angle:

1. Select the two points at each end of a line or curve segment, or select a point on a curve segment and display the curve control points.
2. Choose Recall Values/Angle. The point selection cursor appears.
3. Click on a selected endpoint or a curve control point, and the point is moved to the reference angle.

 **Specifying a Value**

 **See also: Control Points**


Recall Values (Length)

The Recall Values/Length command (under Construct in the Draw menu) adjusts a segment to the reference length set using the Save Values/Length or Specify Values commands.

To use Recall Values/Length:

1. Select the points at each end of a line or curve segment, or select a point on a curve segment and display the curve control points.
2. Choose Recall Values/Length. The point selection cursor appears.
3. Click on a selected endpoint or a curve control point, and the point is moved to the reference length from the other point.

 **Specifying a Value**

 **See also: Control Points**


Recall Values (Perpendicular)

The Recall Values/Perpendicular command (under Construct in the Draw menu) makes a segment perpendicular to the reference angle set using the Save Values/Angle or Specify Values commands. If no angle has been set or specified the segment is made vertical.

To use Recall Values/Perpendicular:

1. Select the points at each end of a line or curve segment, or select a point on a curve segment and display the curve control points.
2. Choose Recall Values/Perpendicular. The point selection cursor appears.
3. Click on a selected endpoint or a curve control point, and the point is moved perpendicular to the reference angle.

 **Specifying a Value**

 **See also: Control Points**


Recall Values (for X)

The Recall Values/X command (under Construct in the Draw menu) moves a point to the X coordinate (horizontal reference point) set using the Save Values/X or Specify Values commands.

To use Recall Values/X:

1. During freeform editing, choose Recall Values/X. The point selection cursor appears.
2. Click on an endpoint or a curve control points, and the point is moved to the reference X coordinate.

 **Specifying a Value**

 **See also: Control Points**


Recall Values (for Y)

The Recall Values/Y command (under Construct in the Draw menu) moves a point to the Y coordinate (vertical reference point) set using the Save Values/Y or Specify Values commands.


To use Recall Values/Y:


1. During freeform editing, choose Recall Values/Y. The point selection cursor appears.
2. Click on an endpoint or a curve control points, and the point is moved to the reference Y coordinate.

 **Specifying a Value**

 **See also: Control Points**

Recall View

The Save/Recall command in the View menu (or the icon  in the Toolbox) displays the view last saved with the Save View command.

 **See also: The Save View Command**

comm


Redisplay View (F12)

The Redisplay View command erases the screen and redraws it.

EXPRESS' multitasking feature allows you to continue with other operations without waiting for the screen to redraw. Because of this, it is possible to get several steps ahead of the screen redraw.

Instead of finishing several operations and waiting for the redraw to catch up, use the Redisplay View command to instantly catch up by redrawing the entire image once.

You may also want to use Redisplay View to view the drawing order of objects, or to clear the screen of "artifacts" left from previous manipulations.

 **Using Accel-O-Draw to Speed Redraw**

comm

Reverse Points Order

The Reverse Points Order command in the Draw menu is designed primarily to allow you to adjust the position of text along a path, although it can produce different effects for the calligraphic pen and for shape blending.

To make the text along a given path draw from the opposite direction, select the text-along-path object and select the Reverse Points Order command.

 **Set Drawing Start/End Point**

 **Blending Objects**

comm

Save (F9)



The Save command in the File menu or the button on the Style Bar saves the current document to the path and name shown in the title bar if the document has previously been saved. If the document has not been named, or if the document is unchanged, the Save menu item in the File menu is disabled; the Save As menu item is the appropriate option.

Note: If your document is unchanged or you haven't drawn anything yet on the drawing area, F9 will not save the document. Instead, choose Save As from the File Menu.

When you save your drawings and pictures, a copy is actually written onto the computer disk. The computer can then read that copy back onto the EXPRESS drawing area using the Open command.

Choose "Include Thumbnail" to create a thumbnail image for the GED. The thumbnail image allows you to preview the document before opening it. You can also add a description of the file in the "Description" field.

Note: You should save the description when you save the file. You cannot add descriptions in the Open dialog.

If the document has been saved previously, choosing the "Make Backup" option will retain the old document when the new one is saved. The old document will be given an extension of BAK.





See also: The Open Command



See also: Thumbnails

Save and Recall Styles

For a current EXPRESS session, the color, fill, line, and type styles of a selected object can be saved by pressing Ctrl+R or Save in the Styles menu. You can then apply these styles to another object by selecting it and pressing Shift+R or Recall in the Styles menu. If you make a mistake, use Undo to restore the former styles. You may determine which styles are saved from one selected object and recalled on another either by clicking with the content menu button on the eyedropper icon  or by choosing the Save/Recall command in the Styles menu. A menu will appear with the following style options: all styles, color, fill, line, or type.

The Save As command (under Style Bundles in the Styles menu) stores the graphic attributes and text attributes of a selected object under a name for use in future EXPRESS sessions. Clicking with the content menu button on  displays the list of currently-available named styles.

 **Saving Styles Using the Eyedropper**

 **See also: Graphic Attributes**

 **See also: Text Attributes**

Save As

The Save As command displays the Save dialog box. Use this dialog box to save new or unchanged [GED](#) files to disk.

Choose "Include Thumbnail" to create a thumbnail image for the GED. The thumbnail image allows you to preview the document before opening it. You can also add a description of the file in the "Description" field.

If the document has been saved previously, choosing the "Make Backup" option will retain the old document when the new one is saved. The old document will be given an extension of BAK.

Enter a file name (up to 8 characters) and click on Save to save the document to disk.


 **See also: Thumbnails**

Save Values (Angle)


The Save Values/Angle command (under Construct in the Draw menu) stores the angle of a selected segment in memory. Another segment can then be set to this angle using the Recall Values/Angle command.

To use Save Values/Angle:

1. Select the points at each end of a line or curve segment, or select a point on a curve segment and display the curve control points.
2. Select Save Values/Angle. The point selection cursor appears.
3. If you selected a segment, click on one of the selected points to save the reference angle. If you selected a point on a curve segment, click on a control point to save the reference angle.

 **Save Values (Length)**

 **Recall a Specified Angle**

 **See also: Control Points**

Save Values (Length)

The Save Values/Length command (under Construct in the Draw menu) stores the length of a selected segment in memory. Another segment can then be set to this length using the Recall Values/Length command.

To use Save Values/Length:

1. Select the points at each end of a line or curve segment, or select a point on a curve segment and display the curve control points.
2. Select Save Values/Length. If you selected a line segment, the length of the segment is saved as the reference length. If you selected a curve segment or a point on a curve, the point selection cursor appears. Click on a point or a control point to save the reference length.

 **See also: Control Points**

 **Save Values (for X)**

 **Recall a Specified X Value**

Save Values (for X)

The Save Values/X command (under Construct in the Draw menu) stores the X coordinate location of a selected point in memory. Another point can then be set to this coordinate using the Recall Values/X command.

To use Save Values/X:

1. During freeform editing, select Save Values/X. The point selection cursor appears.
2. Click on a freeform point. The X coordinate of the point is saved.

 **Save Values (for Y)**

 **Recall a Specified X Value**

 **See also: Freeform Points**

Save Values (for Y)

The Save Values/Y command (under Construct in the Draw menu) stores the Y coordinate location of a selected point in memory. Another point can then be set to this coordinate using the Recall Values/Y command.


To use Save Values/Y:

1. During freeform editing, select Save Values/Y. The point selection cursor appears.
2. Click on a freeform point. The Y coordinate of the point is saved.

 **Recall a Specified Y Value**

 **See also: Freeform Points**

Save View

The Save/Recall command in the View menu (or the icon  in the Toolbox) stores the current view in memory.

This view can then be displayed at any time using the Recall View command.

 **See also: The Recall View Command**

Select All (Ctrl+A)

The Select All command selects all objects in the drawing area.

A single set of handles appears around all of the objects, and you can manipulate the objects as a temporary group. (Press Ctrl+G or the Content menu button to form a group that can be manipulated as a single object.)

Note that this command selects all of the objects in the drawing area, including any that may be outside of the current viewing level.

Multiple objects can also be selected using [Shift+click](#) or the Block Select tool .

 **Block-selecting Objects**


comm

Send to Back (Shift+F)

The Send to Back moves a selected object behind all other objects on the drawing area.

Using the Bring to Front and Send to Back commands, you can overlap and layer objects.

 **See Paste Behind**

 **See also: Bring to Front**

Set Start/End Point

The Set Start/End Point command in the Draw menu lets you designate which freeform point in a closed shape is the start/end point. The start/end point is the point where the outline of the object begins and ends drawing.

When blending from one freeform object to another, the start/end points on the two shapes should coincide as much as possible.

Select a closed shape, then select the Set Start/End Point command. The current start/end point is automatically selected; click on another point to make it the start/end point.

When binding text to a shape, the text will begin at the start/end point and proceed in the current drawing direction.

 **Set the Drawing Direction**

 **Reverse Points**

 **See also: Freeform Points**

Shape Info

The Shape Info command in the Draw menu displays the Shape Info dialog box.

This dialog box lists the number of points, line segments, and curve segments in a selected freeform object. When blending from one freeform object to another, these numbers should match as closely as possible between the two objects to create a smooth transition.

You can also use this dialog box to choose the method used for filling closed shapes. The "Even/Odd" and "Winding Fill" methods have different effects on filling certain closed shapes; experiment to see which method best suits your needs.

 **The Freeform Object Info Dialog Box.**

comm

Show Gradients

This command affects the screen display only. The Show Gradients command under Quick Display, Gradients, in the View menu toggles the display of gradient fills on and off. A check mark beside the menu item indicates its status. If you elect to show gradients, there are two additional options; Better and Faster. The Better option will provide the smoothest gradients but they will take longer to display on screen. Faster will display the gradient fills more rapidly but they may appear choppy or banded. Remember that the Better and Faster options only apply to screen display and have no effect on the printed output.



Show Gradients On

comm

Size

The Size command in the Type submenu lists commonly used typeface sizes shown in points. You can specify your own sizes by choosing Specify; The Type Size dialog box appears.

 **See The Type Size Dialog Box**

comm

Snap

The Snap command in the Draw menu toggles the following snap options: Snap to Points, Snap to Grid, Snap to Line/Curve, and Snap Off.

When Snap to Points is on, the cursor will snap a selected freeform point to another point when it is moved within the snap radius of the point. When Snap to Grid is on, the cursor will snap a selected freeform point to a grid point when it is moved within the snap radius of the grid point. When Snap to Line/Curve is on, the cursor will snap to a freeform line or curve if the cursor is moved within the snap radius of the object. Snap Off toggles the Snap command off.

The Snap radius can be adjusted using Snap Options.

- Snap to Points**
- Snap to Grid**
- Snap to Line/Curve**
- Specifying Snap Options**

Snap Options

The Snap Options command in the Draw menu displays the Snap Options dialog box.


Use this dialog box to set the following snap parameters:

Snap Radius -- Defines an area around freeform and grid points. When Snap to Points or Snap to Grid is on, you can ensure that endpoints are placed on top of freeform or grid points.


New Object Radius -- Defines an area around an endpoint. When drawing, start a line segment within the New Object Radius of an endpoint to continue drawing from that endpoint.


Snap to First/Snap to Nearest -- Snaps to the first point encountered inside the snap radius, or to the nearest point within the snap radius.


Snap to Grid

 The "to Grid" command under the Draw menu's Snap menu item enables and disables the Snap to Points function. This function is also available from the button bar.


During freeform editing, a line segment will snap to a point on the grid when the line is drawn within the snap radius of a grid point. This allows you to begin or end a line exactly from a specific point on EXPRESS' grid. The grid need not be displayed.

 The Snap to Grid button toggles between the Snap to Points button and

 the Off button.

 **Setting the Snap Radius**

 **See also: Snap to Points**

 **See also: The View Options Dialog Box**

Snap to Line/Curve


The Snap to/Line/Curve command in the Draw menu toggles Snap to Line/Curve on and off.

When Snap to Line/Curve is on, the cursor will snap to a freeform line or curve even if no freeform point exists along it. (As for all snap functions, the cursor must be moved within the snap radius of the object.) This lets you start drawing a line exactly from an existing freeform object, or place the end of a line exactly on another object.

Setting Snap Options


comm


Snap to Points

 The "to Points" command under the Draw menu's Snap menu item enables and disables the Snap to Points function. This function is also available from the button bar.


During freeform editing, a line segment will snap to a point when Snap to Points is on and a line is drawn within the snap radius of a point. This allows you to begin or end a line exactly from or on an existing freeform point.


Note: Snap to Points affects only the object currently being edited. Snapping a line segment to a point on separate freeform object is not possible. For this function see Join Open Shapes.

 The Snap to Points button toggles between the Snap to Grid button and

 the off button.

 **See also: Setting Snap Options**

 **See also: Snap to Grid**

 **See also: Join Open Shapes**

Solid (Fill)

The Solid command in the Fill submenu sets the fill of the currently selected object(s) to a solid pattern (color). If you choose a solid fill for an object which previously had None specified, the object will be set to the current fill color.

comm

Specify Values



The Specify Values command under Construct in the Draw menu or the tool in the Construct flyout displays the Specify Values dialog box.

Use this dialog box to interactively set and recall coordinates, lengths, and angles.

You can also enter the values without reference to a particular point. For example if you want to save the value of 45 degrees for future segments, type in 45 for the angle.

To use Specify Values:

1. Convert the selected object to freeform by pressing F8.
2. From the Draw menu, choose Construct, then choose Specify Values.
3. Click on the icon for X, Y, Length, or Angle in this box. Use the cursor to choose the point you want to save or recall. (The dialog box will remain visible.) Notice that the value changes to the right of the icon.

With a reference angle or coordinate saved, you can choose Mirror X or Mirror Y from the Angle or Points menu to change the reference setting to its mirror along the X or Y axis, respectively.

With a reference angle saved, you can select Perpendicular to recall an angle perpendicular to the reference.



Recall a Specified X Value



Recall a Specified Y Value



Recall a Specified Angle



Recall a Specified Perpendicular

Split (F6)

The Split command (under Construct in the Draw menu) displays the Split cursor.

During freeform editing, point the Split cursor on a line or curve and click the mouse. Open shapes are split into two open shapes; closed shapes are split into open shapes.

comm

Style Bundles

The Style Bundles command in the Styles menu displays commands which allow you manage the styles that come with EXPRESS and those that you create.

Note: The Style Bundle submenu is the same as the content menu that displays when you click the content mouse button on the style button.

<u>Command</u>	<u>Description</u>
Custom	Displays the Custom Style dialog box in which you can specify color, lines, fills, and type. You can also change existing styles to suit your needs.
Styles Palette	Displays the Styles Palette dialog box in which you can scroll through the available named (pre-designed) styles for type, lines, fill, etc. You can also change existing styles or add new ones to suit your needs by clicking on the Custom button.
New Styles	Clears the Styles Palette dialog box and opens a new style file (*.sty). See Save As below for information on saving a new style file.
Open	Displays the Open Styles dialog box. <u>As New</u> should be checked so that the current styles are removed. If you desire to add styles from another file to the current styles loaded in EXPRESS, click off As New.
Save As	Displays the Save Styles As dialog box. You can save styles you create to a new *.sty file.

The Custom Style Bundles Dialog Box

Styles



The Styles menu or the tool on the Style bar displays commands for modifying the graphic attributes and text attributes of a selected object. (Pressing the Content menu button displays a list of options that you can see by clicking on the above button.)

Editing shortcut: After selecting an object, press and hold the content menu button anywhere on your work area and you will see a Content menu similar to the following one. Still pressing on the Content menu button, scroll to the command you want.



 **The Styles Palette Dialog Box**

 **The Custom Styles Dialog Box**

 **Style Bundles**

 **See also: Graphic Attributes**

 **See also: Text Attributes**

Symbol (Ctrl+S)

The Symbol command in the Draw menu or the second tool in the Objects/Libraries flyout



displays the Symbol dialog box. Use this dialog box to place a numbered Arts & Letters clip art symbol into a document, or choose from one of the 65 often-used symbols in the horizontally scrolling window. The numbered symbols are displayed in the Clip-Art Manager, and can be located with its Find command.



Using Symbols



The Clip-Art Manager



Making Objects Proportional

Text (Ctrl+T)

The Text command in the Draw menu allows you to enter words and phrases up to 5,000 characters. When you click on the Text command, the Enter/Edit Text dialog box appears. From there you can enter the text and click on Add.

The Add Object cursor will appear; place it where you want the upper left of the words to appear. Click the mouse to have the words appear at their default size, or drag the mouse to size the text object.

To edit the text, first select the text object in the work area, and click with the Content menu button. You can replace or modify the selected words in the Enter/Edit Text dialog box. Click on Replace to replace the words in the text object.

- The Enter/Edit Text Dialog Box**
- Using Text**
- Modifying Text within a Text Object**

Trace Bitmap

The Trace Bitmap command in the Draw menu displays the Trace Bitmap cursor.

Use the Trace Bitmap cursor to trace closed areas of uncompressed black & white TIFF images. The tool must be applied separately for each closed area.

Point the Trace Bitmap cursor at the bitmap and click the mouse. EXPRESS will automatically trace the bitmap.

Setting Parameters for Bitmap Tracing

comm

Transform (Ctrl+W)

To display the Transform dialog box, pull down the Arrange menu and click on the Transform command or click on the Numeric Bar buttons at the bottom of the screen. Use the Transform dialog box to numerically position, size, rotate, and slant objects.

Position and size transformations use the current [unit of measure](#), as set using the Options command in the View menu.

To transform an object, select the object and choose the Transform command. Select the type of operation desired: size, position, rotate, or slant.

Choose Relative or Absolute to transform the object in relation to its current state or in absolute units. For example, if an object is currently rotated 30 degrees, a relative rotation of 20 degrees will mean that the transformed object will be rotated $30 + 20$, or 50 degrees. An absolute rotation of 20 degrees means that the transformed object will be rotated 20 degrees.

The "Fixed Point" selection allows you to specify an "anchor point" for the transformation. You can choose one of the 9 preset points or enter your own in X and Y coordinates. (You can locate an X and Y position by moving the cursor in the document work area. The X and Y position of the cursor is displayed in the Style bar.)

The Duplicates option creates a transformed duplicate of the selected object, while leaving the original object unaffected.

If you use the numeric bar (shown below) at the bottom of the EXPRESS screen, the first two buttons display the Transform dialog box with size selected in the Operation box. They are marked with an w and a y respectively. The center button, labeled with an r displays the Transform dialog box with rotation selected in the Operation box.

The last two (marked with h and v) display the Transform dialog for slant values horizontal and vertical.



The Transform Dialog Box



Repeat Transformation on Another Object

Transform Again (Shift+W)

The Transform Again command applies the last-specified transformation to a selected object.

For example, if the Transform command was used to resize an object by 50%, selecting the same object or another object and choosing Transform Again will resize the object by 50%.

 **See Transform**

comm

Type Palette


The Type Palette command in the Type submenu displays the Type Palette dialog box. Select from the palette predetermined line weights and patterns. In EXPRESS you can customize lines by clicking on the Custom button. To change any predetermined style, choose Custom from the Type submenu.

 **See The Type Palette Dialog Box**

 **See The Custom Type Dialog Box**

comm

Type Style (Ctrl+Y)

The Type command in the Styles menu displays various options for changing the styles of type. Clicking on Custom in the submenu under Type displays a dialog box where you can specify a typeface, as well as its size, alignment, word and letter spacing, and style. Clicking with the Content menu (right mouse) button on  also displays the Custom Type dialog box. (Pressing and holding the Content menu button displays a list of options that you can see by clicking on the above button.)


An option button under the typeface list lets you select printer fonts, if desired. Click on the printer name and the supported fonts appear in the typeface list.

Scroll down in the list to find the typeface you want and highlight it. Type its size in the size box. Once in the work area, it can also be sized like any object.

Click on [Italics](#) to set the style of the words to normal or italic.

Click on [Spacing](#) to set the character spacing, word spacing, leading, kerning, and aspect (condense/extend) value.

Click on [Styles](#) to set the style of the text: normal, bold, underlined, or italic.


Choose the Name button to name the current combination of type styles. A dialog box appears; enter the name desired and click on Name. The name appears in the named type style list. To apply a named type style to a selected object, select the name and click on Apply. Outside the Custom Type dialog box, this named list is accessible by giving a click of the left mouse on .

Click on **Apply** to apply the type style to all selected text objects.

Editing shortcut: After selecting an object, press and hold the Content menu (right mouse) button anywhere on your work area. Still pressing on the Content menu button, drag to the command you want.



 **The Custom Type Dialog Box**

 **See also: Printer Fonts**

 **See also: Work Area**

Undelete/Undo (Ctrl+Z)

The Undelete/Undo command restores the last object deleted, and undoes move, size, rotate, slant, and style change operations.

The command name changes to reflect the most recent operation that can be undone. For example, if you just deleted an object, the command reads Undelete. If you just moved an object, the command reads Undo Move/Size.

comm

UnGroup (Shift+G) and Break Apart

Ungroup

The Ungroup command in the Arrange menu separates a selected group into its individual objects.

Break Apart

The Break Apart command in the Effects menu separates selected extrude objects, charts, text on a path, clipping masks, and holes.

Note: When you break apart a chart, it is reduced to its graphic elements with no link to the original chart data.


 **See: Grouping Objects**


View Options

The Options command in the View menu lets you set the units of measure, create a reference grid, and show page borders.


The choice of units of measure is inches, centimeters, or picas. You can also choose the grid spacing: grid dots can be placed from 1/10 unit apart to 6 units apart.

Back and Front buttons let you choose to draw the grid and/or page borders behind or on top of all objects in the drawing area.

 **The Viewing Options Dialog Box**

 **Modifying Other Screen Elements**

Warp/Perspective (Add)


To specify warp and perspective effects for a selected object, pull down the Effects menu and select the Warp/Perspective/Add command or use the  tool to display the Warp/Perspective dialog box.


To use Warp/Perspective/Add:

1. Select an object.
2. Choose Warp/Perspective/Add. A dialog box appears, and a default warp shape is applied to the object.
3. Use the Warp/Perspective commands in the dialog box to modify the object as desired, or drag points on the warp envelope to reshape the object.


Holding the Shift key while dragging a handle allows you to move the warp object to another location in the drawing area.

4. When you have achieved the desired effect, click on Done.

 **The Warp Dialog Box**

 **Editing a Warp**

Warp/Perspective (Edit)

The Warp/Perspective/Edit command in the Effects menu or through the  tool displays the Warp/Perspective dialog box, through which you can edit the warp or perspective effect of a selected warp object.

To use Warp/Perspective/Edit:

1. Select an object that has been modified with the Warp/Perspective/Add command. (When you select the object, the object name "Warp Shape" is displayed in the Style bar.)
2. Choose Warp/Perspective/Edit. A dialog box appears.
3. Use the Warp/Perspective commands in the dialog box to modify the object as desired, or drag points on the warp envelope to reshape the object.


Holding the Shift key while dragging a handle allows you to move the warp object to another location in the drawing area.

4. When you have achieved the desired effect, click on Done.

 **The Warp Dialog Box**

 **See also: Warp/Perspective Commands**


Warp/Perspective (Recall)

The Warp/Perspective/Recall command in the Effects menu (or through the  tool) applies the last-saved warp/perspective effect to a selected object.

Applying Warps


comm

Warp/Perspective (Remove)

The Warp/Perspective/Remove command in the Effects menu (or through the  tool) removes a warp/perspective effect from a selected object.

comm

Warp/Perspective (Save)

The Warp/Perspective/Save command in the Effects menu (or through the  tool) stores the warp/perspective effect of a selected warp object in memory.

Applying Warps

comm

Work Area

The work area (referred to as the drawing area) is the blank area bounded by the Style bar at the top, the Toolbox at the left, and the Numeric bar at the bottom of the EXPRESS window.

The Work Area command in the View menu allows you to determine the size of your work area. You can remove parts of the EXPRESS window or, by toggling with Ctrl+7, remove everything except your drawing, for a presentation or a screen capture.

The following are the Work Area submenus:

Show Toolbox: Toggles the Toolbox on and off. The Toolbox contains tools for drawing and editing, text entry and editing, and clip-art management.


Show Status/Style Bar: Toggles the Style Bar on and off. The Style Bar contains the color palette, line palette, fill palette, type styles dialog, and other tools useful in manipulating objects.

Show Numeric Bar: Toggles the Numeric Bar on and off. The Numeric Bar displays information about the size and position of objects along a two dimensional x and y axis. It is also an indication of the cursor position on the drawing area. When an object is on the drawing area and selected, you can access the Transform dialog box by clicking on the numeric indicators.

Show Hint Line: Toggles the Hint Line on and off. The Hint Line displays information about the part of the EXPRESS screen currently under the cursor.

Show Rulers: Toggles the rulers on and off. The ruler increments can be displayed in picas, inches, or centimeters. As you zoom in on your art work, you are able to more accurately size and move objects. Note that hairlines on the rulers mark and follow the cursor position.

Zoom In (Ctrl+O)

The Zoom In command in the View menu or the Zoom In tool in the toolbox produces the Zoom In cursor (shown on the Zoom In tool) . Use it to drag a box around the area of interest.

You can also click on a spot with the left mouse button to enlarge that area as much as possible.


 **See Views Flyout**

Tools and Style Buttons



Flyouts, represented by [icons](#) in the Toolbox, execute commands. For a description of any tool and how it works, click on the illustration to the left.

Ten of the Tool icons, identified by small indented triangles in the upper-right corner of the icons, have a special function.

 When you point on one of these icons and hold down the left mouse button, a flyout toolbar will be displayed.



Note that some flyouts have pushpins

. The pushpin allows you to keep a set of tools displayed on screen during other operations.

The Toolbox can be temporarily removed using the Work Areas command in the View menu. It can also be moved around the Drawing Area by clicking on its system menu button in the upper left corner and choose Floating.

Style Buttons

Just under the Menu Bar are six Style buttons. Click on these representations for information about the purpose and function of each of the Style buttons.

 Color	 Type Style
Palette	 Styles
 Color Fill	
 Line Style	Eyedropper

Browsing EXPRESS Tools & Buttons

The on-line Help for EXPRESS defines and illustrates each tool. Use the <<Page and Page>> buttons to browse alphabetically through the tools. When you are at the beginning or end of a browse group*, the respective button will be disabled or turn gray. To choose another browse group, pull down the What's New Menu and choose Help Browser. Another menu will appear displaying additional browse groups.

* A browse "group" is a collection of terms, commands, tools, etc. that are related according to function, definition, or content. For example, the browse group "Commands" allows you to browse all EXPRESS commands. You can access the browse groups when you choose Help Browser from the What's New menu.

Add Handle Tool



Holding the left mouse button down on the Construction flyout in the Toolbox displays the Add Handle tool



The Add Handle tool changes the cursor to the Add Handle cursor.

During freeform editing, point the Add Handle cursor on a line or curve and click the left mouse button to add a point handle at that location. You can continue to add point handles until you click the Content menu (right mouse) button.

 **See Other Construct Tools**


Arrange Objects Flyout




The Arrange Objects flyout displays the following four tools and a pushpin



The tools work on two or more selected objects which you can align, stack (move to front or back), group, and ungroup.

 **Aligning Objects**

 **Changing Stacking Order**

 **Grouping Objects**

 **UnGrouping Groups**

Block Select Tool



The Block Select tool displays the Block Select cursor.

Use this cursor to [drag](#) a box around all objects you want to select. A single set of handles appears around the selected objects, and you can manipulate the objects as a temporary group. You can also choose to [group](#) the objects.

 **Block Selecting Objects**

Color Style Button



The Color style button displays the color palette. Use it to select colors for the lines and the interior fill of objects.

First check the Line and/or Fill boxes to apply the color to an object's lines or interior.

Look over the choice of colors; scrolling may be necessary. If the premixed colors are not sufficient, press Custom to mix your own. Clicking on the Content menu (right mouse) button would have taken you immediately to the Custom dialog box.)

Click on the color in the palette (or Apply the mixed custom color), and the color is applied to all selected objects.



The Color Palette



The Custom Color Dialog Box

Construction Flyout



The Construction flyout displays the following tools for modifying freeform objects:

Add Handle Tool

Split Tool

Make Horizontal/Vertical

Make Joins Smooth Tool

Align Selected Points Horizontally

Align Selected Points Vertically

Specify Freeform Values

Draw Tools Flyout



The Draw Tools flyout displays the line and curve tools.



[Drag](#) the Line or Curve cursor to draw. A [freeform object](#), with freeform points marking the segments, is created as you draw.

Release the mouse button. Click and drag again from the end of a line to create connected line segments.

Note: that you can alternate use of the Line and Curve tool at these pauses.

Release the mouse button, move the cursor away from the segment just drawn. Click and drag again to draw a new, unconnected line.

When finished drawing lines, click the Content menu (right mouse) button. On the first click, the edit cursor appears and the lines can be edited. On the second click, [object handles](#) appear around the lines and the lines are drawn using the current [graphic attributes](#).

Duplicate Tool



The Duplicate tool changes the cursor to the Duplicate cursor.

[Move](#) or [size](#) objects using the duplicate cursor to create duplicates at the new position or size.


Effects Flyout





The Effects flyout displays a flyout toolbar.



These special effects tools allow you to merge and blend objects, to bind text to a shape, to extrude objects, and to warp objects.

 **Merging Objects**

 **Blending Objects**

 **Binding Text to Shape**

 **Extruding Objects**

 **Warping Objects**

Extrude Tool

This tool opens the Extrude dialog box.

To edit an extruded object or add an extrusion:

1. Select the object.
2. From the Effects menu, choose Extrude and select Add/Edit from the menu item flyout.

 **See Extruding Objects**

Fill Style Button



The Fill style button displays ready-made fill patterns.

To modify the fill pattern and/or color, press Custom or click on the Content menu (right mouse) button to go immediately to the Custom dialog box.)

Click on a fill from those provided or define your own and it is applied to all selected objects.

 **Explore the Custom Fill Dialog Box**

Freeform Shape Edit/Text Point Edit Tool



The Freeform Shape Edit/Text Point Edit tool lets you edit a selected freeform object.

Select a freeform object and choose Edit Drawing. Point handles appear on the object and the triangular edit cursor appears. You can [drag](#) the point handles to reshape the object.


The Control Points command in the View menu lets you display [control point handles](#) on curves, giving you even more editing control. Choose the Control Points command to turn it on, then click on a point handle on a curve. Control point handles are displayed. Drag the curve control point handles to reshape the slope of the curves.

When finished editing, click on the Content menu (right mouse) button.

When the object selected is text, the Edit Drawing tool changes to the



Freeform Text tool. This tool allows you to change the attributes and placement of individual words and characters within a single text object.

 **Modifying Text within a Text Object**

Hide/Unhide Objects Flyout



The Hide/Unhide Objects flyout displays the Hide and Unhide tools.

The Hide tool prevents the selected object from being (accidentally) modified and removes it from view. It remains in your document but cannot be viewed or selected until shown by clicking on the second icon in the Lock flyout menu.



The Object Browser, a dialog box for Locking, Hiding, and Naming from a list all the objects in your document, is accessible by pressing Ctrl+H or the Backspace key.


Line Style Button



The Line Style button displays the Line Styles palette. Use this palette to select a predefined line style, or click on the Custom button to see the Custom Lines dialog box and specify a line width and a [line pattern](#).

A list box displays a list of named line styles. To select a named style, click on the name in the list. To modify the line width or pattern, press Custom. Clicking on the Custom button with the Content menu (right mouse) button would have taken you immediately to the Custom dialog box.)

Click on OK to apply the current styles or those you have defined to the lines of all selected objects.

 **Explore the Custom Lines Dialog Box**

Lock\Unlock Objects Flyout



The Lock\Unlock Objects Flyout displays the Lock and Unlock tools.

Lock\Unlock tool prevents the selected object from being (accidentally) modified. The object remains visible but cannot be selected until it is unlocked by clicking on the unlock button.



[Object Browser](#) allows you to lock, hide, and name objects from a list all the objects in your document. You can access the Object Browser by pressing Ctrl+H or the Backspace key.

Make Horiz/Vert Tool



Holding the left mouse button down on the Construction flyout in the Toolbox makes accessible the Horiz/Vert tool



While in freeform edit mode, click on the Make Horiz/Vert tool to display the Point Selection cursor. Click the Point Selection cursor on a curve control point to make the control point horizontal or vertical in relation to its associated curve point.

Select the endpoints of a line segment using [Block Select](#) or [Shift+click](#), then click the Point Selection cursor on one of the endpoints of the segment to move that point to a horizontal or vertical position.

 **See Other Construct Tools**

Make Joins Smooth Tool



Holding the left mouse button down on the Construction flyout in the Toolbox makes accessible the Horiz/Vert tool



While in freeform edit mode, select a point:


- Between two curve segments,
- Between a line and curve segment, or
- At both endpoints of a line segment next to a curve segment.

Choose the Make Join Smooth tool. The point selection cursor appears.

If you click on a freeform point between two curves, the curves are adjusted to make a smooth join. To adjust just one of the curve segments, click on the appropriate curve [control point handle](#).

If you click on the point between a line and curve, or on the corresponding curve control point, the curve is adjusted to join smoothly with the line.

If you selected the two endpoints on a line, click on either endpoint. The line is adjusted to join smoothly with the adjoining curve.

 **See Other Construct Tools**

Pointer Tool



The Pointer is the default cursor. It is displayed when no other cursor is selected. Use the pointer to [select](#), [move](#), and [size](#) objects.

When another tool is selected, you can deselect it by clicking on the Pointer tool.

Resource Libraries Flyout



The Library tool displays four options.

Releasing the mouse button on the first option displays the Clip-Art Manager dialog box.



Releasing on the second option displays the numbered Symbol dialog box; the third, the Activity Manager; and the fourth, Charting.

Clip-Art Manager Tool

The first option displays the Clip-Art Manager. A scrolling representation of clip art is displayed in thumbnail view at the bottom of this dialog box. (If the thumbnails are not displayed, click on [Thumbnails](#) in the menu bar.) Now you can use the pointing hand to [drag](#) a clip-art object into your drawing area. Use the Find button to locate clip-art images by keyword.

Note: A quick way to display the Clip-Art Manager is to press the Enter key.

Symbol Tool

The second option displays the Symbol dialog box, which allows you to select one of the 65 often-used objects displayed in the scrolling box. This box also displays the symbol number of a selected, ungrouped object -- information that is sometimes needed in the construction of charts.

Activity Manger Tool

The third option is the Activity Manager. Selecting it displays a dialog box for choosing among various EXPRESS lessons, samples, templates, and test documents.

The fourth option allows you to create charts and graphs.



How to Use the Clip Art Manager



How to Use Symbols



How to Use the Activity Manager



How to Create Charts and Graphs

Rotate Tool (Transform Objects Flyout)



The Rotate tool changes the cursor to the Rotate cursor for interactive object rotation, and displays the center point cursor.

[Drag](#) the center point cursor to set the pivot point around which rotation will take place.

Point on an object handle and drag to rotate the object around the center point cursor.

To the right of Rotate in the flyout menu



is the Slant tool, which allows you to interactively slant any object.



Slanting an Object



Specifying Absolute values for Rotation

Shapes Flyout



The Shapes flyout displays seven frequently used shapes.



Hold the [mouse button](#) down and move it over the desired shape. Release the button to select that shape.

Click the mouse button for the symbol to appear at its default size, or [drag](#) it to size a [bounding box](#) for the symbol. When you are through adding one or more of the symbols, click on the Content menu (right mouse) button to cancel the operation.

Show Control Points Button

During freeform editing, the Show points button toggles the display of curve [control point handles](#) on



and off



When Show Points is on, curve control points will be displayed during freeform editing whenever a point on a curve is selected. You can then [drag](#) the control points to adjust the curve.

You can also toggle curve control points on and off using the Point Display/Control Points command in the View menu.

During object editing, the Show Points button toggles the display of freeform points on and off.



When Show Points is on, selected freeform objects will display diamond-shaped freeform points as well as the usual object handles.

Slant Tool (Transform Objects Flyout)



The Slant tool (second in the Transform Objects flyout) changes the cursor to the Slant cursor, and displays the center point cursor.

[Drag](#) the center point cursor to set the slant axis for the object.

Point on an object handle and drag to slant the object around the axis marked with the center point cursor. The Style bar displays the degree of horizontal and vertical slant.

Corner handles slant horizontally and vertically, left/right handles slant vertically, and top/bottom handles slant horizontally.

Note: Text objects should be slanted by [italicizing](#) them left or right.

 **Specifying Absolute Values for Slant**

Snap To Button

The Snap To button toggles through the following snap options; Snap to Points, Snap to Grid, and Snap Off.



When Snap to Points is on, the cursor will snap a selected freeform point to another point when it is moved within the snap radius of the point. This lets you start drawing a line or curve exactly from an existing freeform point, or place a point exactly on another point.



When Snap to Grid is on, the cursor will snap a selected freeform point to a grid point when it is moved within the snap radius of the grid point. This lets you start drawing a line or curve exactly from a grid point, or place a point exactly on a grid point. The grid need not be displayed.



Snap off.

The Snap radius can be adjusted under Snap Options.



Specifying Grid Options



Specifying Snap Options

Split Tool



Holding the left mouse button down on the Construction flyout in the Toolbox makes accessible the Split tool



The Split tool changes the cursor to the Split cursor.

During freeform editing, point the Split cursor on a line or curve and click the mouse. Open shapes are split into two open shapes; closed shapes are split into open shapes.

 **See Other Construct Tools**

Text Tool



The Text tool displays the Enter/Edit Text dialog box.

To enter text, type up to 5,000 characters in the dialog box and click on Add. The Add Object cursor appears; place it where you want the upper left of the words to appear. Click the mouse to have the words appear at their default size, or [drag](#) the mouse to size a bounding box for the words.

To edit words, first select the words in the drawing area and then click with the Content menu (right mouse) button. You can replace or modify the selected words in the Enter/Edit Text dialog box. Click on Replace to replace the old words in the drawing area with the edited words from the dialog box.



Using Text



Modifying Text within a Text Object

Type Style Button

The Type style button displays the Type Styles palette. Use this palette to select a predefined type style, or click on the Custom button to see the Custom Type dialog box and specify a [typeface](#), [type size](#), [type attribute](#), and [word alignment](#). Clicking on the Type style button with the Content menu (right mouse) button would have taken you immediately to the Custom Type dialog box.

Click on Italics to set the style of the words to normal or italic.

A list box displays a list of named type attributes. To select a named attribute, click on the name in the list.

Click on OK to apply the attribute to all selected words objects.

 **Explore the Custom Type Dialog Box**

 **Modifying Text within a Text Object**

Views Flyout (Zoom In/Out)



The Views flyout displays several tools used to control the viewing level.



Produces a cursor so you can [drag](#) a box around the area of interest. It corresponds to the Zoom In command in the View menu and to the Ctrl+O shortcut key.



Zooms out to the previous view. It corresponds to the Previous command in the View menu and to the Shift+O shortcut key.



Saves the current view. It corresponds to the Save command in the View menu.



Returns to the saved view. It corresponds to the Recall command in the View menu.



Zooms to actual view. It corresponds to the Actual command in the View menu and to the Ctrl+1 shortcut key.



Fills the screen with the current page. It corresponds to the Current Page command in the View menu and to the Ctrl+2 shortcut key.



Fills the screen with all the pages available. It corresponds to the All Pages command in the View menu and to the Ctrl+3 shortcut key.



Pins and unpins the options to the screen, letting you have them always available.

Once you have the Zoom cursor, you can also click on a spot with the left mouse button to enlarge that area to show the maximum detail.

The Toolbox is the column of icons located to the left of the drawing area. Ten of these icons reveal flyouts that you can pushpin to the drawing area to keep them handy while editing your work.

Browsing the EXPRESS Glossary

There are dozens of terms defined in the EXPRESS glossary. Use the <<Page and Page>> buttons to browse alphabetically through the definitions. When you are at the beginning or end of a browse group* the respective button will be disabled or turn gray. To choose another browse group, pull down the What's New menu and choose Help Browser. Another menu will appear displaying additional browse groups.

* A browse "group" is a collection of terms, commands, tools, etc. that are related according to function, definition, or content. For example, the browse group "Commands" allows you to browse all EXPRESS commands. You can access the browse groups when you choose Help Browser from the What's New menu.

Add/Remove (Mix) Paint

Add/Remove Paint affects an object's color by either removing the pigments that can be thought of as comprising that object's color or by adding a pigment to the color. The pigments that can be added or removed are represented as any named colors plus the default primary colors and are available in the drop down list box. Add/Remove Paint is intended as a tool by which one can mix (and unmix) colors in a way analogous to the way in which an artist mixes paints on his palette.

Application

A program used for a particular task, such as presentation graphics, desktop publishing, or word processing.

Arch -- Warp Shape

Choosing the arch shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Aspect (Condense/Extend Value)

The value, set with the spacing command in the Custom Type dialog box, which represents the width-to-height ratio of text. A condense/extend value of 100% produces text with the standard width-to-height ratio. A value less than 100% produces condensed text, and a value greater than 100% produces extended text.

 **Custom Type Dialog Box**

Attributes

Characteristics of an object. The graphic attributes (which affect symbols, text, and freeform objects) are fill color, fill pattern, line color, and line type. The text attributes (which affect text only) are typeface, type size, leading, character spacing, condense/extend value, text alignment, and type style. All attributes have default settings which you can change.

Basic Drawing Shapes

The Shapes command in the Draw menu or the Shapes icon in the Toolbox



displays seven frequently used shapes



Highlight the shape that you want and release the mouse button. The resulting cursor allows you to draw the shape any number of times until dismissed with the content menu button.

The arc in the lower right of the flyout is especially useful for [binding text](#) to that shape.

Bell -- Warp Shape

Choosing the bell shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Bezier Curves

A Bezier curve is a "cubic polynomial" representation of a curve that allows great flexibility and control in manipulating the curve. Any complex curve can be constructed in Bezier segments. The Bezier curve model is the one used by PostScript. When you export a file in CGM, WMF, or HPGL format, all Bezier curves are translated into straight line (vector) segments for compatibility with those formats.

 **See Vector Image**

Bitmap Pictures

A bitmap picture is made of thousands of tiny dots, or pixels. Bitmap pictures are created by "paint" programs like Windows Paintbrush and by scanners.

Pictures in bitmap format can be placed in EXPRESS through the Windows Clipboard. You can also use the [Import](#) command to import a bitmap picture in TIF, BMP or DIB format.

Bitmaps from these "paint" programs are composed of pixels. However, scanned photographs and photographs that appear in newspapers and magazines are composed of tiny dots called halftone dots, which are not the same as pixels. For one thing, halftone dots vary in size, while pixels are a single, much smaller, size. Many pixels form a "halftone cell" that attempts to match the variable size of the halftone dot. The higher the resolution of your output device, the more pixels that make up the halftone cell, and thus the sharper the picture.

BMP File Format

The BMP (standard Windows bitmap) file format allows graphic images to be transferred between computer programs. Scanned pictures are often saved as BMP images. EXPRESS can import and export BMP files.

Raster Images

Bounding Box

The bounding box is rectangle that completely encloses an object. When you use the block select tool, a thin-line bounding box encloses the object(s) as you drag the cursor.



Brightness/Contrast

Brightness is used to adjust the intensity of a color. Increasing the brightness of a color moves (in the color space) the color toward white. Brightening a color makes it more pastel and less saturated. Decreasing the brightness of a color moves the color toward black. There is not necessarily a simple relationship between the effects of this filter on a color and the components of the color in the hues model. Increasing brightness does not necessarily affect only the %White component. Likewise, decreasing brightness does not necessarily affect only the %Black component.

Contrast is used to affect the similarity of groups of colors. Decreasing contrast causes affected colors to appear more similar. Increasing contrast causes affected colors to appear less similar. As contrast is decreased for a collection of colors, the colors move (in the color space) toward middle gray (RGB: 128,128,128). As contrast is increased for a collection of colors, the colors move away from middle gray. Geometrically, Contrast applies a scaling filter that stretches or compresses the component ranges so that colors become closer or farther apart in the color space.

Brightness and Contrast operate in parallel. That is, one can adjust both simultaneously.

CDR File Format

CDR is the extension of Corel Draw file format that EXPRESS can import. Export in CDR format is not supported.

CGM File Format

CGM (Computer Graphics Metafile) files are used by assorted graphics applications.

Chart Types

EXPRESS supports five of the most popular chart types:

- Area Chart
- Line Chart
- Point Chart
- Bar Chart
- Pie Chart

Click On

"Clicking on" is the selection of a function or an object with the mouse. Place the [cursor](#) on an item in the menu bar such as a dialog box button, or an object in the Drawing Area. Press and release the left mouse button.

If the item selected is an object in the Drawing Area, [object handles](#) will surround the object and its name will appear in the object viewer.

 **Select Objects**

Clip-Art Collections

Clip-art collections allow you to access hundreds of precolored and preassembled clip-art images. These images are grouped in categories called collections, everything from aerospace to zoology. You can also create and maintain your own collections of artwork. All clip-art collections have a default file extension of YAL.

Using the Clip-Art Manager

Clip-Art Manager (Ctrl+M)

A command in the Draw menu. The Clip-Art Manager lets you select from thousands of precolored symbols, art forms, and clip-art images. Each is named and filed by category; for example, "Horse" is filed under the category of Nature-Animals, while "Federal Reserve Bank" can be found in Buildings/Structures.

Using the Clip-Art Manager


Clipboard Formats

EXPRESS allows you to cut and paste objects through the Windows clipboard in Arts & Letters, Windows Metafile, and Bitmap formats. A text paste format is also supported.

Choose a cut/copy format that is supported by the application that will paste the image. If an image is cut or copied to the clipboard in Arts & Letters format, choose the desired paste format.


If an image later pasted from the clipboard does not print properly, it will be necessary to import it into your document in one of the file formats supported by EXPRESS.

 **The Windows Clipboard**

 **Importing and Import Formats**

Clipping Mask

An object used as a "cookie cutter" to clip all objects beneath it. Only those parts of the objects that lie within the mask remain visible after clipping.

 **How to Use Clipping Masks**


CMYK Color Model

The CMYK color model creates colors by mixing different percentages of cyan, magenta, yellow, and black (K). The CMYK model is also called four-color or process color and is widely used in the printing industry. Some common colors and their CMYK values are:

Light Blue	Light Gray	Pink
80/20/0/0	17/8/9/0	0/60/40/0
Dark Blue	Dark Gray	Dark Red
100/60/0/40	55/55/55/0	0/100/100/20
Brown	Bright Green	Purple
60/80/80/0	100/0/69/0	21/42/2/0
Orange	Pale Yellow	
0/60/80/0	0/0/30/0	

Color Palettes

Color palettes are sets of named colors, usually related in some way and/or designed for a specific purpose. Palettes included with EXPRESS include wood colors, food colors, jewel colors, flesh tones, and more.

 **Naming and Saving Colors**

 **See also: Color**

Color Separation

EXPRESS allows you to print a separate page for each color of your work, which you can then take to a color print shop. This separate page for a given color is a color separation. Process, or four-color, separations use four basic colors which print dot patterns over one another and mix in the eye to form various colors. Spot-color separations use many distinct colors which essentially do not overprint and which are pre-mixed by the ink supplier.

Note that only named colors can be spot separated; therefore, if you mix a color for use in a document, select the Name button in the Custom Color dialog box to name the color.

Color separations can be printed to PostScript-capable devices only. If a PostScript printer is not selected as the current output device, the separation options are grayed and cannot be selected. To print separations to a file, use the Printers section of the Windows Control Panel to connect a PostScript printer to the port FILE. Select this printer as the target printer in Arts & Letters, and choose the Print button in the Print dialog box. (Do not use the To File button).

To print color separations, choose Print from the File menu. In the Separations field, click on Spot or Process, then on Setup. A dialog box appears.

Highlight the colors desired from the list by clicking on each one. A separate print will be generated for each selected color. (Normally you will select all colors.)

In the Printing field, set the Emulsion Down and Negative Image options according to the preferences of your print shop. Typically, both options are turned on.

In the Screen field, enter the desired [screen angle](#) and [frequency](#). Only your print shop can supply values other than the defaults.

In the References field, choose to print [marks and labels](#) if desired, then click on OK. Typically, both options are turned on.

If you wish to change the default [undercolor removal](#) parameters, click on UCR. The defaults are most likely to work best.

Click on OK in the Print dialog box. The separations are automatically generated and printed. If you print to a file, only one file is created; when that file is printed it will produce a separate print for each separation.

Four-Color Separations

Spot-Color Separations

Color Wash

Color Wash replaces the color with a selected percentage of another color (wash). E.g., if you wash a 100% cyan object with 40% yellow, the result is an object that is 60% cyan and 40% yellow.

Colorize with Base Color

Colorize with Base Color replaces the color with percentages of a selected base color, in a manner similar to Convert to Grays.

Command

A command is an instruction given to a computer. A menu is a list of commands, and the toolbox places commands under icons.

Command Button

A three-dimensional rectangle with rounded edges, found in a dialog box, that shows a command (such as Apply, Cancel, OK, Save, or Open).

Complex Curve

A curved shape made up of more than one Bezier segment. When you draw a curved shape with EXPRESS, it is automatically converted into a simple (single Bezier segment) or complex (multiple Bezier segments) curve. You can use the Complex Curves check box in the Drawing Options dialog box to specify that you want a sketched curve converted to a single Bezier segment.

 **Bezier Curve**

Content Menu

A Content menu is the list of command options displayed for a selected object when the [content menu button](#) is pressed and held.

Control Menu

The control menu is found in every application window. It is located in the upper left-hand corner of an application window and contains commands used to change the window's size and location, to close the application, or to switch to another application. To display the Control menu, hold down Alt while you press the Spacebar, or point to the Control menu box and click the left mouse button.



Convert to Color Negative

Convert to Color Negative replaces the color with its complement color. For example in (CMYK), the color (20, 30, 40, 0) becomes (80, 70, 60, 0). The K component is preserved as much as possible.

Convert to Display Solids

Convert to Display Solids replaces the color with the most similar Windows System Color for a 16 color display, replaces the color with the most similar EXPRESS Windows Palette color for a 256 color display, and is not available for a high color or true color display.

Convert to Gray Negative

Convert to Gray Negative replaces the color with the complement of its corresponding grayscale value.

Convert to Grays

Convert to Grays changes a color to its corresponding grayscale color. The K (black) value of the original color is preserved as much as possible. A color with a K of 0 will be converted to a gray with K of 0. A color with a positive K value will be converted to a gray with a positive K value.

Convert to Grays (K only)

Convert to Grays (K only) changes a color to its corresponding grayscale color with the CMYK values: C=0, M=0, Y=0, K=grayscale value.

Convert to Opti-Pal Colors

Convert to Opti-Pal Colors replaces the color with the most similar dithered EXPRESS Windows Palette color. This filter is available only for 256 color displays. This filter can remove dithering artifacts without substantially changing the color of an object and is used to optimize the 256 color displayed appearance of an object.

Convert to Primaries

Convert to Primaries changes a color to the closest or most similar primary color: White, Red, Green, Blue, Cyan, Magenta, Yellow, or Black.

Convert to Pure Hues

Convert to Pure Hues sets the %White and %Black of a color to zero.

Convert to Pure Shades


Convert to Pure Shades sets the %White of a color to zero.

Convert to Pure Tints

Convert to Pure Tints sets the %Black of a color to zero.

Corner Join

A non-smooth join between two curve segments, or between a curve and a line segment.

 **Smooth Joins**

Current Page


The current page is the page wherein the most recent action (adding, moving, or manipulating an object) was performed. Selecting an object on a page also makes that page the current page.

Cursor

A small graphic symbol you move around on the screen with the mouse or the keyboard arrow keys to choose commands and accomplish various tasks. Many tools have cursors relevant to the work that they do.

Curve Segment

A single Bezier curve. Curve segments are marked by a handle at each end.

 **Bezier Curve**

Custom Collection

Individual or grouped objects organized into collections using the Create Clip Art Collection dialog box in the Collection menu of the Clip Art Manager or the Activity Manager. The default extension for custom collection files is .YAL.

DEF File Format

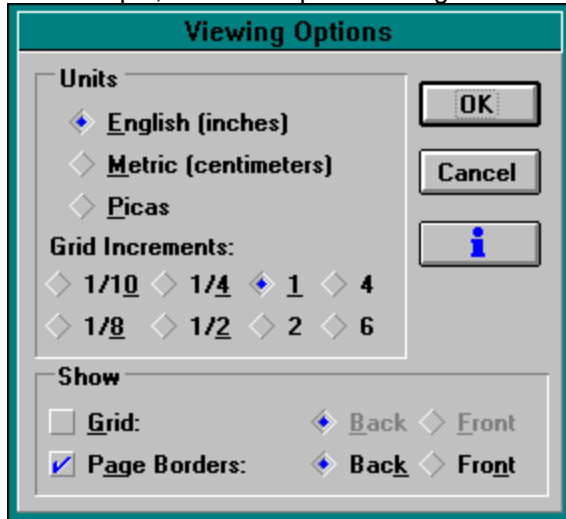
DEF stands for [defaults](#), and is the file extension used by EXPRESS for its default files. DEF files will save defaults for color, fill, line weight, type attributes, viewing options (e.g., whether in inches or picas, whether there is a grid), page setup, printer setup, and several other settings. Chart.DEF saves the type of chart and its colors and elements.

Access DEF files through Defaults/Open in the [File menu](#). Each user can create his own personalized DEF file, then open it when starting an EXPRESS session. You can also save your settings to apply to all future EXPRESS sessions by saving your defaults to the file Startup.DEF.

Dialog Box


A Dialog box appears when EXPRESS needs more information before it can carry out a command. When you click on a command that is followed by three dots ..., a dialog box will appear, prompting you for responses such as Apply/Cancel, Yes/No, etc.

For example, the View Options dialog box.



DIB File Format

The DIB (Device Independent Bitmap) file format allows graphic images to be transferred between computer programs. EXPRESS can import DIB files.


 **Raster Images**

DIF File Format

Data Interchange Format, supported by many spreadsheet programs.

Dither

A method of placing black or color pixels in an image to produce the effect of various shades of gray or color. EXPRESS uses color dithering to simulate colors not available on the screen because of specific graphics card limitations.

 **See also: Halftone**

Document Precision

To change the document precision, pull down the [File menu](#) and select Page Setup, then click on the Document Precision button.

The document precision value determines the "fineness" of the internal grid that EXPRESS uses to render images. The fact that the size of this grid is a fixed number entails a few important considerations.

First, there is a limit to the image size that can be created in EXPRESS. The normal document precision for EXPRESS is 1440 units per inch. Dividing this number into the grid size gives a maximum image size of a little over 22 inches square. In order to render a larger image, the Document precision command can reduce the units per inch to as small as 180 so that an image over 177 inches square can be created.

Second, there is a tradeoff between largest image size and drawing fineness. EXPRESS always prints at the highest resolution of your output device. However, the practical effect of drawing using, for example, 180 units per inch is to print curves that are not perfectly smooth because fewer coordinates are available to render curve segments.

Drag

To drag a cursor, you press and hold the left mouse button, then move the mouse. When done, release the mouse button.

You can drag an object from the keyboard by holding down the Spacebar while pressing the arrow keys.

Drag and Drop

EXPRESS can paste certain files if they are dropped from the File Manager or similar application that supports Drag and Drop. GED and PAL files can be dropped on the EXPRESS executable file.

The file will replace the current EXPRESS document, style, or palette respectively, or will be appended if you hold down the Ctrl key while dropping the file. Other files that are automatically appended to the current EXPRESS document include TIF, PIC, STY, DIA, YAL, and TXT. DEF files can also be dropped on EXPRESS and will replace the current defaults file.

DRW File Format

DRW is the extension of a graphics file format that EXPRESS can import. Export in DRW format is not supported.

DXF AutoCAD File Format

DXF is an file extension for AutoCAD, which EXPRESS can import.

Emulsion

Emulsion is the light-sensitive layer of chemicals that coats photographic film or paper. A service bureau or printer typically wants color separation files with the emulsion side down.

Enter/Apply Key

Pressing the Enter or the Apply key carries out an action. In some dialog boxes, instead of clicking on Done or Apply with the mouse, you can press Enter on your keyboard. In the case of typing letters in the Enter/Edit Words dialog box, the Enter key starts a new line, and the Add button must be clicked on to place the text on the page.

EPS File Format




The Encapsulated PostScript format is a vector file format that allows graphic images to be transferred between computer programs. EXPRESS can export and import files in the EPS format.

Even/Odd Fill

A method for shading the interior of a closed shape. Shading begins at the first border, stops at the second, begins at the third, etc.

Files

You save the drawings you make with EXPRESS in files. The files created by EXPRESS are called documents. If you do not save your work in a document, it will be discarded when you exit EXPRESS or start a new document.

-  **Saving a Document**
-  **Deleting a Document**
-  **Renaming a Document**

Fill



Select Fill in the Styles menu or click on the [Fill style button](#) below the menu bar to add patterns to the interiors of objects.



How to Define a Fill

Fill Styles (Ctrl+I or Tab)

In the Custom Fill dialog box is a list of predefined fill styles you can use to fill the interior of objects.



Access the Custom Fill dialog box by using the [content menu button](#) to click on the Fill style button or by just pressing the Tab key while no other operation is in progress. (To access the list of fill styles directly, click on the Fill style button with the left mouse button.)



The Custom Fill Dialog Box



The Gradient Fill Dialog Box



See also: Color Style Button



See also: Combinations of Custom Styles

Fixed Disk

The fixed disk of your computer is where your programs and many other files are stored.

Flexible Diskette (Floppy Disk)

You can store your files on 3-1/2 inch or 5-1/4 inch flexible diskettes. Flexible diskettes can be removed from your computer and stored elsewhere.

Four-Color Printing

Separating a color image into process color breaks it down into four color components: cyan, magenta, yellow, and black (respectively symbolized by the letters CMYK). A negative from each of these components is created, from which printing plates are made. Paper is run through a printing press and each of the four colors is laid down on the paper in tiny cyan, magenta, yellow, and black ink dots. The eye sees these dots as a whole and combines them into what appears as be a color image.

EXPRESS can print a separation, or separate page, for each of the four CMYK colors for use by a color print shop.

- Screen Angles**
- Screen Frequencies**
- Emulsion Down**
- Negative Images**
- Crop Marks and Labels**

Freeform Object

A freeform object is any combination of connected lines and curves that can be edited in EXPRESS. Freeform objects are those created by using the [Line and Curve tools](#), or symbols [converted](#) into freeform objects.

Freeform Points (Ctrl+5)

Freeform Points are handles whereby an object can be edited. They appear only on freeform objects. The Freeform Points command under Point Display in the View menu toggles the display of freeform points on and off.

Freeform -- Warp Shape

Choosing the freeform shape displays both point handles and control points on the warp envelope. [Drag](#) handles on the warp envelope to adjust the shape of the object.



GED File Format

The GED (Graphic Environment Document) format is a proprietary, efficient file format used by EXPRESS and other Arts & Letters programs to store [documents](#) on disk.

Gradient Fills

Gradient fills are composed of a starting color, an ending color, and a series of transitional colors in between. In EXPRESS, you choose the starting and ending colors, and the transitional colors are generated automatically.

Gradient fills are modified in the Custom Fill and the Custom Style Bundles dialog boxes.

 **The Custom Fill Dialog Box**


 **The Gradient Fill Dialog Box**

Graphic Attributes

Attributes are characteristics of an object. The graphic attributes are color, fill, line, and type. Text attributes are typeface, type size, type style (normal or italic), and alignment. All attributes have default (predetermined) settings that you can change. Attributes of your own can be saved within a single EXPRESS drawing session by selecting the model object and pressing Ctrl+R; they are then applied to other objects by selecting them and pressing Shift+R, or by using, respectively, the left and Content menu mouse button with the Eyedropper.

Group

A group is two or more objects bound together using the Group command. You can manipulate a group as if it were one individual object. The objects are grouped together until you ungroup them using the Break Apart command.

 **Group Command**

Hairlines


A hairline is the thinnest possible line that an output device is capable of producing. On high-resolution output devices, a hairline will be so thin as to be almost invisible; on lower-resolution devices, a hairline will be a solid, thin line.

To specify a hairline, enter a line width of 0.0 in the Line styles dialog box. (Choose None in the Line Pattern options to eliminate lines altogether.)

 **The Custom Lines Dialog Box**

Halftone

A method of using varying sizes of dots to produce the effect of various gradients and shades of gray.

 **Raster Images**

Hint Line



The Hint Line is the bar stretching across the very bottom of your EXPRESS screen, displaying a brief description of the item currently under the cursor. It should be your first resource for on-line Help.

Hues Color Model

The Hues color model creates colors by starting with a particular color and then adding different amounts of white and/or black. Some common colors and their Hues values (in the form hue/percent white/percent black) are:

Light Blue 195/20/0	Light Gray 172/90/8	Pink 340/40/0
Dark Blue 240/0/40	Dark Gray 0/100/55	Dark Red 0/0/20
Brown 0/50/60	Bright Green 138/0/0	Purple 272/59/2
Orange 15/20/0	Pale Yellow 60/70/0	

Icon

An icon is a small picture that suggests what a tool or cursor does. For example, the Draw Line icon in the [Toolbox](#) shows a picture of a pencil drawing a line.

Imagesetter

A high-resolution PostScript printer that creates camera-ready prints on resin-coated paper or on film.

Italics



You can select this option in the Custom Type dialog box quickly accessed clicking on the content menu button to make letters and numbers slant (either to the right or left). Italics add emphasis to words by slanting them.

This sentence is in italics.

If you select Italics from the Custom Type dialog box, EXPRESS shows you a default of 15 degrees, which you can change. Put a minus sign (-) in front of the numbers to slant the letters to the left.

 **The Custom Type Dialog Box**

Justified

Justified text is an option in the Custom Type dialog box. All lines in a justified paragraph are of equal length. You must supply line breaks at the ends of lines or sentences.

This is justified text. Notice how the lines are of equal length and that the characters and words are spaced to accommodate justified text.

 **The Custom Type Dialog Box**

Kerning

Moving text characters to optimize the spacing between them. Some letter combinations (such as Av, Ty, etc.) appear to be spaced too far apart. Kerning tightens the letter spacing for these pairs to compensate for this effect.

Leading

The amount of vertical space, measured in points, between the base lines of two successive lines of text in a text object. Set the leading value using the Spacing command in the Custom Type dialog box. Use a value greater than the type size value to separate lines of text, or use a lesser value to overlap text lines.

 **The Custom Type Dialog Box**

Line Pattern (Ctrl+L)

Line Pattern is an [attribute](#) found in the Line styles dialog box (quickly accessed by giving a [content menu button](#) click on



or by pressing Ctrl+L).

EXPRESS includes a solid line pattern, an assortment of dashed line patterns, various line thicknesses, and arrowheads in assorted shapes. Select "None" to eliminate all lines from a selected object.

 **The Custom Lines Dialog Box**

Line Width

Line width can be specified from 0.0 to 72.0 points (72 points = 1 inch). A 0.0 width line is also known as a "hairline"; it defines the thinnest possible line that an output device is capable of producing. (To eliminate a line, choose None as the line pattern.)


Margins



Margins are areas of empty space at the top, bottom, and left and right edges of a document. When you specify margins in EXPRESS, the document work area displays only the "live" area of a page. Therefore, if you place an object at the edge of a page on the screen, it will not print at the edge of the paper, but will be indented by the amount of the margin.

 **Page Setup**

Maximize Button

The Maximize button  enlarges the Arts & Letters window to cover the entire area available on your screen.

Minimize Button

The Minimize button  reduces the Arts & Letters window to the Arts & Letters icon.

Mouse Button

Typically a mouse has an inside, or left, and right, or secondary, button. Use the left mouse button to select objects and to click on dialog box buttons and tools in the [Toolbox](#). In EXPRESS the right button is called a content menu button because it displays and activates functions related to the content menu. Use it to complete editing of a [freeform](#) object and to access the custom features of the six [Style buttons](#).

 **Using the Content Menu Button to Make Quick Edits**

 **See also: Content Menu**

Multi-tasking


Multi-tasking is the ability of a computer to perform several tasks at once. While true multi-tasking is available in the Windows environment only under Windows NT, many EXPRESS tasks can be performed simultaneously if you do not leave the program; for example, you can execute commands while the EXPRESS screen is redrawing.


Negative Image

Printing plates for a printer are typically made from negative film, or film with clear images on a black background. You can make color separation files in EXPRESS when you [print to file](#) by checking the Negative image check box.

Non-Proportional (Sizing)


When you [drag](#) one of the four middle [handles](#) of an object, you flatten or stretch the object, and it no longer has its original width-to-height proportions.

 **Making an Object Proportional**

 **Sizing Objects**

Object

An object is a single graphic, such as a symbol, text object, freeform object, or clip art. An object can be a group of many composite objects. For example, an airplane object can consist of wings, propellers, and canopy objects, each of which becomes an object when the group is ungrouped.

 **Freeform Objects**

 **Grouped Objects**

Object Handles

When you select an object, eight small squares surround it. A ninth handle marks the center of the object.

Objects can be resized by [dragging](#) the object handles. Use the corner handles to size the object proportionally. The middle handles allow you to stretch or flatten the object.

 **Sizing Objects by Moving Their Handles**

 **Freeform Points**

One-Point Warp Perspective

Choosing the one-point perspective shape immediately reshapes the selected object using a one point perspective effect. [Drag](#) handles on the warp envelope to adjust the perspective of the object.

If Show Perspective Lines is on in the Options menu, dashed perspective lines are displayed to show the current vanishing point. Drag the vanishing point to reshape the object.



Open Shape/Closed Shape

Open shape is a freeform object consisting of one or more line or curve segments, and terminating with an end point at each end of the object.

Closed shape is a freeform object consisting of two or more line or curve segments, and forming a closed object without end points. Only closed shapes can have fill styles.

Joining Open Shapes

Overprinting

The overprinting of fills is most often used when printing black text or line art over a color. When other colors overprint they may combine to produce a new, unexpected, color. Furthermore, this new color cannot be seen on your monitor, since colored objects conceal objects stacked beneath them. The effect is not seen until the artwork is printed.

For example, a transparent effect can be achieved by printing a milky or translucent color over a bolder color. In silk screen printing -- most commonly, in the printing of T-shirts -- the trapping correction provided by overprinted lines may be insufficient because the registration, or alignment, of colors is much less exact than when printing to paper. Overprinting their fills will assure that no white space appears between the adjacent colors.

Trapping

Page Border

The page border establishes the boundaries of a page. You can draw up to and beyond a page border. The parts of any objects that cross a page border will appear on a different page when printed.

Page Orientation




A page is in either one or the other of the orientations shown here.

Page Size

Standard page sizes supported by EXPRESS are:

Name	Inches	Centimeters
Letter	8.50 x 11.00	21.59 x 27.94
Legal	8.50 x 14.00	21.59 x 35.56
Tabloid	11.00 x 17.00	27.94 x 43.18
A3	11.69 x 16.54	29.70 x 42.00
A4	8.27 x 11.69	21.00 x 29.70
A5	5.83 x 8.27	14.80 x 21.00
B5	7.17 x 10.12	18.20 x 25.70
35mm Slide	7.34 x 11.00	18.64 x 27.94
Graphics Screen	8.25 x 11.00	20.96 x 27.94


Custom sizes are also supported. In the Page Setup dialog box, enter the desired size.

 **Page Setup**

PIC File Format

A graphics format used by Lotus 1-2-3, Picture Perfect, and other software. EXPRESS can import PIC files.

Pointer

The Pointer  is the cursor, or mouse-controlled [icon](#), you use to select objects and commands and to [drag](#) handles. The Pointer cursor is the [default](#) cursor for EXPRESS.

PostScript

A page description language, designed specifically to transfer information from a computer to a raster printer. The printer contains an interpreter that translates the PostScript commands into graphics objects on a page. EXPRESS can print to PostScript printers and export documents as PostScript files.

Printer Fonts

EXPRESS supports Windows-compatible hardware and software fonts. Fonts are typefaces of a particular style and size, and they are distributed by many vendors including Adobe and Bitstream. Font files must be loaded in Windows before EXPRESS can recognize them. And although EXPRESS can create a print file that can be carried on diskette to be printed on another printer, final printing requires that the correct hardware fonts be loaded to it. See the Window user's guide or your type manager guide for further information.

To view the current fonts installed on your system, refer to the scrolling typeface listbox in the Custom Type dialog box, which can be accessed by clicking with the right mouse button on the Type Style button on the Style Bar. If you have a printer selected as the source for your typefaces in the Source listbox, each item in the scrolling typeface list above it will be preceded by an icon which indicates whether the font is a TrueType font or a printer font.

The Custom Type Dialog Box

Print References for Separations, Crop Marks

References that label each color separation and that create crop marks (for trimming the final page size) and registration marks (for aligning color separations on the printing press) are provided when printing a document from EXPRESS if the appropriate box is checked under Options for spot color or four-color separations. Since separation prints are made in black and white, it is helpful to have labels noting which print matches which color.

The reference marks and labels created by EXPRESS are placed at the edges of the page as defined by the currently-selected page size and margins. If your page layout does not include a margin area, the marks and labels will not print.

Proportional (Sizing)

When an object is proportionally sized, it keeps its width-to-height proportions. To proportionally size an object, click on and [drag](#) one of its corner handles.

Press the Shift key while sizing proportionally to size from the object's center outward.

Pressing the Ctrl key while sizing with a corner handle temporarily overrides proportional sizing, allowing non-proportional sizing.

PS File Format

PS is the extension of the PostScript file format. EXPRESS can import files created in this format. PostScript files often have other extensions, notably AI and PRN.

Raster Image

A raster image is defined as a collection of pixels (dots). The raster image of a line, for instance, is stored in a bitmap that contains information about the status of each pixel in the entire display, and which is then displayed in a series of horizontal raster lines made up of individual pixels. (The raster is the set of raster lines that make up the display.) Raster images cannot be manipulated as easily as vector or object-oriented images.

EXPRESS offers a number of ready-made raster fills in the Custom Fill and the Custom Style Bundles dialog boxes.

 **Vector Images**

 **The Custom Fill Dialog Box**

Replace Hue

Replace Hue fixes the Hue of a color to a specific value. Replace Hue provides the best results for objects which contain tones, tints, shades of the same or similar hues.

RGB Color Model

The RGB color model creates colors by mixing different amounts of red, green, and blue. Some common colors and their RGB values are:

Light Blue	Light Gray	Pink
51/204/255	211/235/231	255/102/153
Dark Blue	Dark Gray	Dark Red
0/0/153	115/115/115	204/0/0
Brown	Bright Green	Purple
102/51/51	0/255/79	202/147/250
Orange	Pale Yellow	
255/102/51	255/255/179	

Ring -- Warp Shape

Choosing the ring shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Roller Coaster -- Warp Shape

Choosing the roller coaster shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Rotate



To rotate an object means to turn it around some point. In EXPRESS this is done interactively by clicking on the Rotate tool or by entering an absolute degree rotation after clicking on the r button in the transform bar.



Saturation/Shade

Saturation adds white to or removes white from a color. In the Hues model, Saturation affects the %White.

Shade adds black to or removes black from a color. In the Hues model, Shade affects the %Black.


SCODL (SCD) File Format

SCODL (Scan Conversion Object Description Language) files are used by Matrix and other film recorders to print high-quality 35mm slides.

Screen Angle

A color separation printed to file creates a pattern of tiny dots for screens and halftones that print with that color. These dots must align perfectly with dots on another separation to avoid wavy patterns called "moirés." This is accomplished by rotating the dot pattern for each separation a few degrees. This degree of rotation is called the screen angle. Each high-quality imagesetter owned by a service bureau or printer specifies these screen angles for each color model, separation, and resolution. These businesses can supply you with that information. The EXPRESS default angles are 72 degrees for cyan, 18 degrees for magenta, 0 degrees for yellow, and 45 degrees for black.

 **Printing to File**

 **Service Bureaus**


Screen Frequency

Screen frequency, or screen ruling, is the number of halftone dots per vertical or horizontal inch printed by an imagesetting machine. A low screen frequency gives a grainier image. This may be desirable because of the quality of the paper on which you finally print (such as a 65 line per inch screen frequency for newsprint), because of the limitations of the printer (quick print shops usually can't print finer than 133 lpi), or because the effect is more artistic for a given piece.

Screen frequency is often confused with resolution, which refers to the exactness or "hardness" of each halftone dot, rather than to the number of dots in a one-inch row or column.

Each high-quality imagesetter owned by a service bureau or printer specifies screen frequencies for use in combination with each color model, separation, and resolution. These businesses can supply you with that information.

 **Printing to File**

 **Service Bureaus**

Scroll Bar

The scroll bar is located on the right and bottom edges of the EXPRESS window, and in some dialog boxes scroll bars have an arrow on each end and a scroll button. Click on the arrows to move the drawing area up or down and left or right in small amounts. [Drag](#) the scroll button and then release the mouse button to move quickly in the drawing area.

SDL File Format

SCODL is a graphics format used by Matrix film recorders and other devices. For example, a SCODL file could be printed to a 35mm slide file recorder.

Selecting Objects Using Shift+Click

To select objects using Shift+click, point and click on the first object to be selected. Hold the Shift key and click on additional objects. Handles appear around each selected object. The selected objects can be grouped by pressing Ctrl+G.

During freeform editing, use Shift+click in this way to select multiple point handles.

Selecting Point Handles

Service Bureau

A service bureau is a business that specializes in outputting high-resolution graphic images in various formats. The telephone directory of every major city lists such businesses. If there is not one in your town, contact a color printer.

If you are printing in color, either the bureau or printer will typically want a print file containing color separations. They will give you a form asking for detailed information regarding your documents. The topics below will give you that information.

 **Four-Color Separations**

 **Printing to a File**

Slope -- Warp Shape

Choosing the slope shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Smooth Joins

Joins between lines and/or curves that are tangent to each other. Tangent lines are those that intersect along some axis.

Spot-Color Separations

Spot-color separating an image allows the printing of a separate page for each color, none of which prints over another color except for a small overlap where colors are adjacent. A print shop can then combine the separate prints to recreate the original color image.

When you choose Print in the File menu, the Print dialog box offers you options for spot color separations.

- Emulsion Down**
- Negative Images**
- Screen Angles**
- Screen Frequencies**
- Crop Marks and Labels**
- Four-Color Printing**

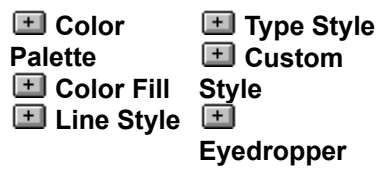
S-slope -- Warp Shape

Choosing the slope shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Style Buttons

Just under the Menu Bar are six Style buttons. Click on these representations for information about the purpose and function of each of the Style buttons.



SYLK File Format

SYmbolic LinK format, supported by Microsoft Excel and other programs.

Text Alignment

EXPRESS supports four text alignments:


Left aligns shorter lines of words in the text object with the left edge of the longest line.

Right aligns shorter lines of words in the text object with the right edge of the longest line.

Centered centers shorter lines in relation to the longest line in the text object.

Justified inserts space between words in shorter lines until they equal the length of the longest line.

EXPRESS does not wrap text automatically.

Text alignment can be specified through the Custom Type dialog box or by selecting Type Alignment in the Styles menu. The Custom Type dialog box can be accessed with a content menu button click on .


To align the entire text object itself with some other object, select it and that other object, and select Align from the Arrange menu (or press Ctrl+N) to display the Align dialog box.

 **The Custom Type Dialog Box**

 **Aligning a Text Object with Other Objects**

Text Attributes

Each text object in the EXPRESS drawing area has text attributes which can be changed as desired. Among these attributes are typeface, type size, type style, spacing, and alignment. In addition, words are objects and so have all the [attributes](#) of graphic objects.

 **Type Style and Typeface**

 **Type Spacing**

Thumbnail Images

A thumbnail is a small picture or preview that helps identify the contents of a file or clip-art image without taking the time to load the file or clip-art image.

When you open a document, import a graphic, or use the Clip-Art Manager, thumbnail images allow you to preview the contents. Each thumbnail image is a small color or black and white representation of the file or clip-art image.

 **Converting Editor Clip-Art Collections and Creating Thumbnails**

 **Opening Documents**

 **Using the Clip-Art Manager**


TIF File Format

The Tagged Image File format is a bitmap file format that allows graphic images to be transferred between computer programs. Scanned pictures are often saved as TIF images. EXPRESS reads TIF files.

Raster Images

Toggle

A toggle is a switch or button that is either on or off. To toggle it is to turn it on or off, typically by removing or placing a check in the box placed beside the command.

The pushpin  is a toggle that removes or keeps a box or option list on your screen.

Trapping

Trapping is the compensation for misalignment (misregistration) of color separations.

A printer combines the separations created in EXPRESS to print all the colors of your composition.

However, any printed piece may show a white, unprinted, gap at the boundaries of adjacent colors where the separations do not register perfectly. By trapping, or slightly overprinting, these adjacent boundaries, the chance of this error occurring is reduced.

In EXPRESS it is recommended that you trap the lines of adjacent colored objects that might misregister during printing. The greater the thickness of the object's line, the greater the trap, or overprint. If a given object has no lines, you can specify a line and then give it the same color as the interior.

 **The Custom Fill Dialog Box**

 **Four-Color Separations**

 **Spot-Color Separations**

 **Color Separations**

 **Overprinting**

TV Controls

TV Controls uses the YIQ color basis for adjusting a color. The YIQ color basis is the what the National Television Systems Committee (NTSC) uses to encode color television signals. TV Controls provides a novel way to "colorize" grayscale images as well as add color to objects in interesting ways.

Two-Point Warp Perspective

The two-point perspective command does not immediately display a default shape. [Drag](#) points on the warp envelope to adjust the perspective of the object.

If Show Perspective Lines is on in the Options menu, dashed perspective lines are displayed to show the current vanishing points. Drag the vanishing points to reshape the object.



Type Spacing

Type spacing can be applied to Arts & Letters typefaces and to printer fonts. In some cases, printer fonts do not contain kerning information, and so cannot be kerned.

Spacing adjustments are applied by pressing the Spacing button in the Custom Type dialog box or by clicking on Type Spacing in the Styles menu. There you can adjust letter spacing (the space between all letters), word spacing (the space between words), leading (the space between lines), kerning (the space between special pairs of letters, such as "Te"), and the [aspect](#).

The Custom Type Dialog Box

Type Style

Type styles allow you to specify how words appear on the Drawing Area.

EXPRESS supports four type styles for printer fonts:



Type (words or letters) can be slanted, colored, or outlined. Type Styles can be specified either through the Custom Type dialog box or the Type Styles dialog box.



The Custom Type dialog box can be accessed by clicking the content menu button on the type style button; the Type Styles dialog box can be accessed by selecting Type Styles from the Styles menu.

When using Arts & Letters typefaces, only the normal and italic styles are available. To create the underlined and strikeout styles, draw a line under or through the text. To create a bold style for a typeface, increase the line weight or select a bolder version of the typeface.



The Custom Type Dialog Box



The Type Styles Dialog Box

Units of Measure

EXPRESS supports three units of measure: picas, centimeters, and inches. Six picas = 2.54 centimeters = one inch.

A pica is made up of about 72 points. Points are the unit of measure for line thicknesses and type size (using the height of a typeface's capital "M").

Vector Drawing

A vector drawing is composed of a series of lines or curves, or a combination of the two. The lines and curves are "seen" by the computer as coordinates mapped out on a grid. A vector drawing of a square, for instance, would be translated by the computer as instructions to draw four straight lines, with each line having a starting and ending point, or coordinate on a grid. A vector drawing of a perfect circle is usually composed of four symmetrical curves (technically referred to as Bezier curves or B-splines) which are arranged in the shape of a circle. Besides the geometry makeup of a vector image, other information is stored, such as fill data, which includes what color the image will be shaded. Another is line attribute data, which includes how thick the lines of the square will be.

When a vector image is enlarged, the computer re-calculates how to draw the stored geometry onto a larger grid. This makes the vector image appear exactly the same as it did when it was at a smaller size. This feature, as well as the storage efficiency of vector drawings, is the prominent advantage they have over bitmap images. On the other hand, it is very difficult (if not impossible) to simulate with a vector drawing the photographic-realism captured by scanned bitmap images.

EXPRESS offers a number of ready-made vector fills in the Custom Fill and the Custom Style Bundles dialog boxes.

 **Custom Fill Dialog Box**

 **See Raster**

Wave -- Warp Shape

Choosing the wave shape immediately reshapes the selected object using the current symmetry and orientation settings. [Drag](#) handles on the warp envelope to adjust the shape of the object.



Wildcard Characters

Wildcard characters are symbols that can be used to replace other characters. The wildcard **?** can be used to represent any character, while the wildcard ***** can be used to represent any group of characters. For more information, see your DOS User's Guide.

Windows Clipboard

[Objects](#) you [Cut](#) or [Copy](#) can be temporarily stored on the Clipboard. Objects in the Clipboard can be retrieved with the [Paste](#) command (or by pressing Ctrl+V) and added to a drawing. The objects in the Clipboard remain there until you cut or copy other objects to the Clipboard. You can add them again and again to the [Drawing Area](#).

WMF File Format

A Windows Metafile is a file format that allows drawings to be moved from one computer program to another by [cutting](#) them to the [Clipboard](#) during a computer session or by saving them to disk.

WPG File Format

WPG is the file extension for the Word Perfect Graphics file format.

Words Baseline

The baseline of a text object runs along the base of the letters, ignoring any descenders hanging below the baseline, like the bottom parts of the letters g and y. When aligning text objects, it is usually appropriate to align along the baselines.

XOR

As it applies to EXPRESS, the XOR function inverts the color of an object in relation to the background during freeform drawing and editing. This is done to ensure that the object being drawn or edited is visible against the background. In some special cases, however, the XOR process can make an object difficult to see against the background. In these cases, you can use the Drawing Options dialog box to set the tracing color.

Browsing EXPRESS Procedures

There are dozens of techniques, methods, and procedures for creating artwork in EXPRESS. Use the <<Page and Page>> buttons to browse alphabetically through the list of procedures. When you are at the beginning or end of a browse group,* the respective button will be disabled or turn gray. To choose another browse group, pull down the What's New Menu and choose Help Browser. Another menu will appear displaying additional browse groups.


* A browse "group" is a collection of terms, commands, tools, etc. that are related according to function, definition, or content. For example, the browse group "Commands" allows you to browse all EXPRESS commands. You can access the browse groups when you choose Help Browser from the What's New menu.

Accelerator Keys

Accelerator keys make it easy to choose the command from the keyboard instead of displaying a menu and highlighting the command with the mouse.

An accelerator key can be a single key (such as the F4 function key or the Del key) or a two-key sequence using the Shift key (Shift), the Control key (^), or the Alternate (Alt), plus a second key, usually shown as KEY+KEY. The accelerator keys are listed in the [menus](#) after the commands to which they apply. Most EXPRESS accelerator keys have the same assignments as Windows accelerator keys.

You can print a list of EXPRESS accelerator keys so the key assignments will be close at hand while you are learning EXPRESS. To print the list of accelerator keys, click on the hotspot below.

 **List of EXPRESS Accelerator Keys**

 **Using version 3.12 Editor Accelerator Keys with EXPRESS**

Accelerator Keys Listed

EXPRESS accelerator keys have been changed to conform to Windows conventions, although you can change them back to the old key assignments if you choose.

Restoring old key assignments

Note that **Ctrl** or **Shift** or **Alt + Key** signifies holding down the first key while pressing the second.

Action Desired **EXPRESS** **Editor 3.12**

Accel-O-Draw	F11	
Actual Size view	Ctrl+1	Ctrl+1
Add (drawing) Handle	F5	F5
Align objects	Ctrl+N	Ctrl+N
All Pages view	Ctrl+3	Ctrl+3
Block Select	Ctrl+B	Ctrl+B
Break group apart	Shift+G	Ctrl+U
Bring to Front	Ctrl+F	Ctrl+F
Browser	Ctrl+H or Backspace	Ctrl+H
Clear (Delete)	Del	Del
Clip-Art Manager. . .	Ctrl+M or Enter	Ctrl+C
Close/Exit	Alt+F4	Alt+F4
Control Points	Ctrl+4	Ctrl+4
Convert Line <-> Curve	F4	
Convert to Freeform	F8	F8
Copy the object	Ctrl+C	Ctrl+Insert
Current Page view	Ctrl+2	Ctrl+2
Curve (add handle)	F5	F5
Curve (control points)	Ctrl+4	
Curve (draw one)	F3	F3
Curve (edit one)	Ctrl+P	Ctrl+P
Curve (its styles)	Ctrl+L	Ctrl+L
Cut	Ctrl+X	Shift+Delete
Deselect All	Shift+A	
Duplicate	Ctrl+D	Ctrl+D
Erase	Del	Del
Fill an object's	Ctrl+I or Tab	Ctrl+I

interior

Freeform/Point Edit	Ctrl+P	Ctrl+P
Full Screen view	Ctrl+7	Ctrl+X
Group	Ctrl+G	Ctrl+G
Help for Items	F1	F1
Join Open Shapes	F7	F7
Line (add handle)	F5	F5
Line (draw one)	F2	F2
Line (edit one)	Ctrl+P	Ctrl+P
Line (its styles)	Ctrl+L	Ctrl+L
Lock/Hide/Name	Ctrl+H	Ctrl+H
Outlines Only view	Ctrl+6	Ctrl+6
Paste	Ctrl+V	Shift+Insert
Points (show)	Ctrl+5	Ctrl+5
Previous view	Shift+O	Ctrl+V
Recall styles	Shift+R	Ctrl+R
Redisplay (redraw)	F12	
Save (the document)	F9	F9
Save object's styles	Ctrl+R	Ctrl+Q
Select All	Ctrl+A	Ctrl+A
Send to Back	Shift+F	Ctrl+K
Show Control Points	Ctrl+4	Ctrl+4
Split	F6	F6
Switch To	Ctrl+Esc	Ctrl+Esc
Symbols (65 basic)	Ctrl+S	Ctrl+S
Text (entering)	Ctrl+T	Ctrl+T
Transform	Ctrl+W	Ctrl+W
Transform Again	Shift+W	Ctrl+O
Type (styles)	Ctrl+Y	Ctrl+Y
Undelete/Undo	Ctrl+Z	Alt+Backspace
UnGroup	Shift+G	Ctrl+U
Zoom In	Ctrl+O	Ctrl+Z

Accessing Clip Art with Find

To use the Find feature in the Clip-Art Manager dialog box:

1. Open the Clip-Art Manager dialog box by pressing Ctrl+M or by just pressing Enter. Click on the Find button.
2. In the upper "Add to List" window type in a keyword or the name of the symbol you want and press the Add button.
3. Narrow or widen the search by selecting "Current Collection" or "All Open Collections."
4. Click on Find.

EXPRESS will search through the fields you have specified, find the relevant images, and group them in a temporary collection entitled "Find...images."

For example, if you typed in "apple" in the "Add to List" window and added it to the list, using the widest field of search (All Open Collections), Find would return as many as eight choices: Apple (1); Apple (2); Apple Core; Apple w/Schoolbooks; Candied Apples; Halloween (witch w/apple); Pineapple; and Serpent & Apple.

Using the Clip-Art Manager

Calligraphic Pen Dialog Box

The Calligraphic Pen Dialog Box can be accessed by clicking on the Define button in the Custom Lines dialog box when the Calligraphic option is chosen. Specify the pen's shape (oval or rectangular) and the orientation (tall or wide), as well as the pen's angle and percentage of stretch.

Changing Chart Attributes

The Elements menu in the Chart window provides a method for changing chart attributes. If desired, you can use the Break Apart command in the Effects menu to break apart a chart into separate symbol, text, and freeform objects which can then be changed using other EXPRESS commands; however, once a chart has been broken apart it becomes a collection of graphic objects and loses its tie with the chart data.

To change chart attributes without losing the chart data, choose Styles from the Elements menu of the Chart dialog box. The Chart Styles dialog box appears.

A list box at the left side of the dialog box displays the various parts of the chart that you can change. The items in the list vary according to which type of chart is selected.


Click on an item in the list, or in the central model chart, then on the button (Color, Fill, etc.) that corresponds to the attribute you want to change. A dialog box appears; select the desired styles and click on OK.

Note: Some chart elements must be edited as a group. For example, choosing Text in the list box applies any attribute changes to all of the text in the chart.

Clip Art Database

The Find feature within the Clip-Art Manager is a powerful clip-art database. It gives you the ability to ask for specific clip-art images from an assortment of collections and to have EXPRESS retrieve all of the images and place them in a separate collection.

To use the Find feature in the Clip-Art Manager:

1. Select the Clip-Art Manager tool . The Clip-Art Manager appears with all of the available clip art. If Find is grayed out, click on Collections, then double-click on a file with the .yal extension.
2. Select the Find button. The Find Images dialog box appears.
3. To select specific clip-art images type the name of the image in the upper "Add to List" window and click on the Add button. Repeat for as many names as you wish to be found.
4. To search for clip-art images by keyword, or general category, type the keyword in the upper "Add to List" window and click on the Add button.
5. Narrow or widen the search by selecting "Current Collection" or "All Open Collections."
6. Click on Find from the Find Images dialog box. EXPRESS will search for the images in all the collections and place them in a temporary collection entitled "Find...images."

Example: If you typed in "apple" in the "Add to List" window and added it to the list, using the widest field of search (All Open Collections), Find would return as many as eight choices: Apple (1); Apple (2); Apple Core; Apple w/Schoolbooks; Candied Apples; Halloween (witch w/apple); Pineapple; and Serpent & Apple.

Note: Keywords or image names can be removed from the Find Images list by clicking on either the Remove button, to remove single entries, or the Clear All button, which clears the whole list.

Using the Clip-Art Manager

Color and Brightness/Contrast Filters List


Click on the button below for an explanation of the filter you want.

- Brightness/Contrast**
- Replace Hue**
- Saturation/Shade**
- Add/Remove (Mix) Paint**
- TV Controls**
- Convert to Grays**
- Convert to Grays (K only)**
- Convert to Pure Shades**
- Convert to Pure Tints**
- Convert to Pure Hues**
- Convert to Primaries**
- Convert to Color Negative**
- Convert to Gray Negative**
- Convert to Display Solids**
- Convert to Opti Pal Colors**
- Color Wash**
- Colorize with Base Color**

Color Filters

This command allows you to globally change the color characteristics of any or all colors in the document by manipulating their relative color characteristics, i.e., brighter, darker, greener, no chroma, etc.

The Color Filters dialog box

Access this function by clicking on the Color style button  then pressing and holding on Custom. (An alternate access is described below.) Drag the pointer down the list to Color Filters. In the resulting box you will see "Artistic" and "Technical" in the upper left.

The "Artistic" color editing method uses a collection of operations which have much more intuitive results. Mix Paint changes color in the same way an artist would by mixing paints on his/her palette -- by adding pigments rather than light components. There are various conversion operations which have an intuitive appeal. Shading and saturation of colors can be achieved by using this approach, as well as grayscale brightness/contrast.

The "Technical" color editing method provides a method for directly editing the components of a particular color. This approach is considered more advanced and less intuitive than "Artistic." The color is broken down into its constituent components in the desired color model (CMYK, RGB, Hues). The user may add to or subtract from (Brightness) a particular component, map the full range of component values to a smaller or larger range (Contrast), or directly substitute for a component value (Replace). Additionally, if the user is working in the CMYK model, CMY can be replaced with K and vice versa to optimize printed output. Each of these operations works in "parallel" with the others; that is, it is possible to use all three operations with a single Apply.

Color brightness/contrast values are not reset when the scrollbars for a different operation are displayed, nor are they reset after the Apply button is pressed.

To use color filters:

1. Select the objects that you want to adjust.
2. Choose Color from the Styles menu. A submenu appears: choose Color Filters. The Color Filters dialog box appears.

The various colors of the selected objects appear in the preview box. Clicking with the right button within the Preview box displays the Color Filters data window which shows the original and preview color components in the appropriate model as well as their respective names.

The Color Filters data window

To apply the Color Filters only to the beginning fill, end fill, or line, select one of the desired style boxes.

3. Choose from the operation list to apply the desired effect.
Each operation has its own type of controls that affect the colors differently.
4. Adjust the specific controls for each operation as desired.

As you adjust the specific controls the new color will appear on the right-hand side of the preview box, next to the original color.

To reset the settings of the dialog box, select the Reset Colors button. To reset the color of an object modified by Color Filters, select Undo from the Edit menu, or press Ctrl+Z.

5. Click the Apply button to apply the color filter changes to the selected objects.

Note: The check boxes beside individual colors indicate whether the operation will apply to that color. The All Colors button at the bottom can also select entire list box entry.

List of Color Filters

Printed Colors

Content Menu Button

The Content menu button is the right, or secondary, button on your mouse. Use it to display a popup menu by pressing and holding it while an object is selected. You can also display Content menus for the six style buttons in the button bar at the top of the screen. Place the Pointer cursor over the menu button and press and hold the Content menu button to display the Content menu.

- | | |
|---|--|
|  Color Style |  Type Style |
|  Fill Style |  Custom Style |
|  Line Style |  Eyedropper |
|  | |

Using the Content menu button to quickly access Content menus is one of the best ways to increase productivity. Practice pressing and holding the Content menu button while pointing on an object that you wish to modify. This method offers the most direct access to EXPRESS functions or dialog boxes appropriate for editing the selected object.


List of Content Menu Button Assignments

Content Menu Button Assignments


Menu Item	Single Click Left Button	Click and Hold Right Button
Palette	Custom color dialog box	Color styles menu
Fill	Custom fill dialog box	Fill styles menu
Lines	Custom lines dialog box	Line styles menu
Type	Type styles dialog box	Type styles menu
Styles	Custom styles dialog box	Custom styles menu
Eyedropper	Save/Recall styles menu	Save/Recall styles menu
Object List Window	Object Browser dialog box	Object Management menu
Style or Numeric Bar	Show or conceal Toolbox, Bars	Show or conceal Toolbox, Bars
Control Points	Toggles Control Points on/off	Point display option menu
Snap Options	Construct menu	Construct menu
Accel-O-Draw	Redraws EXPRESS screen	Redraw Options menu

Control Buttons

At the top of your screen in the left and right corners are control buttons. They determine how much of the current program window is seen in relation to other active Windows program windows.

Clicking on  in the upper left corner or holding down the ALT key and pressing the spacebar displays a control menu. It allows you to restore the entire program window to its last size, to move it, size it, maximize it, and minimize it to an icon (which is then accessible by holding down the ALT key and pressing the TAB key until it appears).

These buttons 

 in the upper right corner offer quick access to window sizing. The downward-pointing button reduces the current program window size, and the upward-pointing one enlarges it.

Converting Graphics Editor Clip-Art

The clip-art collections (or libraries) from the Arts & Letters Graphics Editor (version 3.1x) can be used by EXPRESS. However, you cannot add images to these collections nor will the thumbnail images in the Clip-Art Manager be available until the collections are converted to the EXPRESS format.

To convert the Graphics Editor clip-art collections:

1. Open your ALLETTER.INI file, located in the Windows directory.
2. Find the [EXPRESS] section.
3. Add the line allowoldyalupdates=1 just below the section name.
4. Restart Windows.

Now when you open the Clip-Art Manager, the Save To Collection button is no longer grayed out (inaccessible). This means that you can now use it to add any image on your screen to an open collection. Remember, when you do so, the collection will be inaccessible to other, earlier Arts & Letters applications.

To create a thumbnail, open the Clip-Art Manager and pull down the Thumbnails menu. Then choose Update... then Options... then either B&W or 16 colors. If your monitor displays a muddy image after selecting 16 colors, change it to 256 colors. The process of updating thumbnails also makes a collection inaccessible to earlier Arts & Letters applications.

Creating Gradient Fills

Gradient fills are gradual transitions from one color to another.

The Custom Fill dialog box includes a Gradient button for specifying gradient options. Choosing the Gradient option and clicking this button displays the Gradient Fill dialog box.

The Gradient Fill dialog box contains options for specifying various gradient options. As you select options, the preview area of the dialog box displays a sample of the selected gradient. Experiment with different options and see the result in the preview box to learn the different gradient effects.

Transition. Click on the arrow to display the transition list. The linear options create straight-line transitions; the radial options create circular transitions. The "wave" options bunch colors at each end of the transition, with fewer colors in-between.

Repetition Specify the number of times you want the gradient effect repeated. You can specify repetitions per inch or per object.

Angle Enter the angle desired for a linear or linear wave gradient. The angle can also be set interactively; drag the end of the gradient tool in the preview box to set the angle.

Begin X and Y Enter the location inside of the selected object where the gradient effect is to begin. This location is specified in x and y coordinates. Drag the top of the cross-shaped gradient tool in the preview box to place the origin of the first color.

Beginning Color/End Color To specify the starting and ending colors in the gradient, click on First or Last. The color dialog box appears; select the desired color and click on OK.

Spread By [default](#) the gradient spreads over 100% of the fill of the selected object. However, by typing in a new percentage you can make the gradient cover only part of the object. For example, by specifying a 50% spread, a linear gradient makes a gradation of color from the X location to the middle of the object. For a radial gradient, the gradation of color would blend halfway along an imaginary line between the X and Y location and the most distant part of the object.

Swap Beg<->End. This button allows you to swap the beginning color of the gradient fill with the ending color.

 **The Gradient Fill Dialog Box**

 **The Custom Fill Dialog Box**

Custom Color Dialog Box



Click the content menu button on the Custom Color button to access the Custom Color dialog box.

Choose whether to apply your changes to the object's line or to its interior fill. Check on Show Current Object whenever you want to erase the color mixing and start over.

The Named Colors list displays the ready-mixed colors available in the palettes provided with EXPRESS. Arrow down to see them.

You can mix any color you like using the [CMYK](#), [RGB](#), or [Hues](#) mixing models.

When you select a model, the scroll bars in the dialog box change to the appropriate mixing options.

You can highlight the shown values and type in your own percentage.

Or, using the scroll bar, click on the arrows at each end of it to adjust the values one unit at a time. Click within the scroll bars (to the right or left of the white scroll box) to adjust the values ten units at a time.

[Drag](#) the slider button inside the scroll bar.

If you mix a color for a line, the line will be displayed on the screen as a solid color, but will print as a mixed color if the printer has the capability to do so.

When you are satisfied with the color, click on Apply.



The Custom Color Dialog Box

Decipher EXPRESS Utility

Decipher is a utility that allows you to import and edit files in most of the file formats in use today. Decipher converts vector images (chief of which is [PostScript](#)).

Decipher can be started by double-clicking either on its icon in the Windows Program Manager, or on its executable filename from the Windows File Manager. (EXPRESS need not be running.)

Icon	Filename
	deciphps.exe

Decipher uses the same filters as the EXPRESS Import command. When converting only one or several PostScript or other vector files, using this command is simpler. Use the utility separately for converting many files at a time and for error reporting of files that do not work by direct import.

Note: For editing and converting bitmap files, use Picture Perfect, the raster image editing program which has been provided along with EXPRESS. For those who have used previous versions of EXPRESS, Picture Perfect replaces the Decipher for Bitmap Images utility. For more information about Picture Perfect, refer to the Picture Perfect User's Guide.

Defaults

When you install EXPRESS, it places two configuration files -- STARTUP.DEF and CHARTS.DEF -- in the Arts & Letters directory, and configures STARTUP.DEF as the default configuration file in ALLETTER.INI.

Each time you start EXPRESS, the information in the default configuration file is used to set the attributes, styles, viewing level, and other parameters in the document. During an EXPRESS session you can load and save configuration files as desired. Document configuration includes such items as:

- Viewing level
- Named styles
- Color palette
- Fill Style
- Line Style
- Output specifications
- Clipboard format
- Placement of dialog boxes (pushpinned)
- Display of work area elements

To save defaults:

1. Choose Defaults from the File menu. Click on Save As. The Save Defaults As dialog box appears.
2. Under Save File as Type, you will see Defaults Files. In the Filename window in the upper left, enter a name for the default file. You should use the .DEF extension so that the file will be automatically displayed when you use the Open Defaults dialog box. For example, MY.DEF.
3. Click on Save. The default file is saved.


When you save a default file, any graphic objects in the document will NOT be saved. Default files store configuration information only.

To open a default file:

Note: When you open a default file, any graphics objects in the current document and their styles will be preserved. Only the configuration of the document, as described above, will change.

1. Choose Defaults, then Open, from the File menu. The Open Defaults dialog box appears.
2. Under List Files of Type, you will see Defaults Files. In the Filename window in the upper left, enter a name for the default file, or just click on a file from the directory.
3. Click on Open. The document styles in the default file are assigned to the current document on the screen.

Defining Fill (Ctrl+I or Tab)

The Fill command in the Styles menu displays the Custom Fill dialog box. Clicking on  also displays this dialog box. Simpler still, just press the Tab key on your keyboard when no other operation is in progress to display the dialog box.

Use it to make the interior of an object invisible, solid, filled with a raster pattern, or filled with a vector pattern. You can also change the object's color. (Click on the button shown here to see the options displayed when you hold down the Content menu button.)

To select a [raster](#) or vector pattern, click on Raster or Vector. A number box appears; enter the number of the pattern desired or click on the scroll arrows to scroll through the pattern numbers. As you do, a preview box displays the current pattern.


A list box displays a list of named fills. To select a named fill, click on the name in the list box.

Click on OK to apply the fill to all selected objects.

Editing shortcut: There are two useful shortcuts for fills. When no other operation is in progress, just press the TAB key on your keyboard to display the Custom Fill dialog box. To display the ready-made palette of fill patterns, select the object then hold down the Content menu button. When a content menu appears, drag the cursor to Fills Palette.





 **The Custom Fill Dialog Box**

 **The Gradient Fill Dialog Box**

Deleting Files

You delete the files from EXPRESS' open dialog box. The files created by EXPRESS are called documents (or GEDs). If you want to delete a document, select it in the files list and click on Delete.

 **Saving a Document**

 **Renaming a Document**

Drawing Curves




Click on the Curve tool in the Toolbox. [Drag](#) the Curve cursor to draw curves. When you release the mouse button, your sketch is automatically translated into smooth Bezier curves.

Click and drag again from the end of the curve to create connected curve segments.

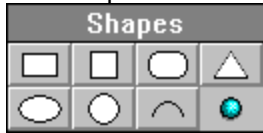
Move the cursor away from the segment just drawn. Click and drag again to draw a new, unconnected curve.

When finished drawing curves, click the Content menu twice and the curves can be changed. On the second click, [object handles](#) appear around the curves. The curves appear on your drawing area using the current [graphic attributes](#).

 **See Modifying Objects in EXPRESS**

Drawing Shapes

The Shapes command in the Draw menu reveals the Shapes submenu.



There are seven shapes to choose from. Select a shape and click the left mouse button to add the symbol at its default size or drag it to size the symbol. When you are through adding one or more of the symbols, click on the right mouse button to cancel the operation.

Editing Chart Data

The Edit menu in the Chart window lets you make changes to the chart data grid. In some cases, editing can be done to ranges of cells; to select a range, [drag](#) the cursor to highlight the desired cells.

The New command clears the entire data grid and resets all chart attributes to their default settings.

The Cut and Copy commands place the contents of a selected data cell or range of cells in the [Windows clipboard](#). The Paste command places the contents of the clipboard into the data grid, using the currently-selected cell as the upper left cell for the pasted data.

The Clear Range command clears all selected data cells.

The Insert Row command inserts a blank horizontal row of data cells at the row marked with a selected data cell. All rows at and below the selected row are moved down. (If data is in the bottom row, it will be dropped out of the data grid.)

The Insert Column command inserts a blank vertical column of data cells at the column marked with a selected data cell. All columns at and to the right of the selected row are moved over. (If data is in the right-most column, it will be pushed out of the data grid.)

The Delete Row command deletes the horizontal row marked with a selected data cell.

The Delete Column command deletes the vertical column marked with a selected data cell.

The Column Width command displays a dialog box. Enter the desired width for the current column (marked with a selected data cell) and click on OK.

Editing Chart Elements


Charts created in EXPRESS can contain a number of separate elements, which can be turned on and off and adjusted using the Elements menu in the Chart window.

To add or edit the chart title and axis titles, choose Titles from the Elements menu. A dialog box appears; enter or edit the titles. The chart title can be up to 49 characters long and axis titles can be up to 24 characters long. (Pie charts do not have axis titles.) Click on OK.

To change the minimum and maximum values of the Y-Axis, choose Y-Axis Scale from the Elements menu. Enter the minimum and maximum values desired and click on OK. (Pie charts do not have a Y-Axis.)

To turn the display of legends, values, the background, backdrop, or backdrop shadow on and off, choose the item name from the Elements menu. When the name is turned on so that it will appear as part of the chart, a check mark appears next to it. (Turning off the backdrop automatically turns off the backdrop shadow.)

One symbol can be stretched or many symbols can be stacked to visually represent the data for bar charts and points. Place the cursor in a cell to the right of the green word "Symbol" and type in the symbol number. Under the Elements menu remove the check mark beside Stack Symbols to stretch one symbol to the height of the chart value; or place the check mark beside Stack Symbols to stack copies of the symbol to the height of the chart value.

The number of a symbol is found by placing a symbol from one of the symbol collections -- indicated by an **(i)** in the Clip-Art Manager -- in the drawing area. Then, with the symbol selected, click on the Symbol tool, the second in the Clip-Art flyout , or press Ctrl+S. Numbers for symbols can also be found in the optional Clip-Art Handbook (available from Computer Support Corporation for \$25.00 plus \$5.00 shipping & handling).

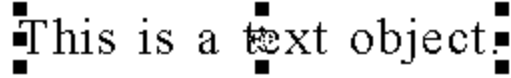
The Elements menu also lets you change [chart attributes](#).

Editing Freeform Shapes and Text

The Freeform/Text Edit command in the Draw menu allows you to edit a selected freeform shape (object) or to control the style and placement of any character in a text object.

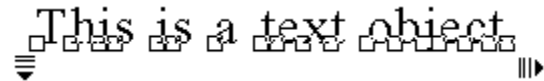
When editing a freeform object: Select the object and choose Freeform/Edit Text from the Draw menu. Point handles appear on the object and the cursor changes to the freeform edit cursor. You can drag selected point handles to reshape the object. Press Ctrl+4 and click on a point on a curve to view curve control point handles. (The intersection point of straight lines will not show curve control handles.)

When editing a text object: Select the text object and choose Freeform/Text Edit from the Draw menu.



The image shows the text "This is a text object." with small black squares (point handles) at the top and bottom of each character, indicating it is in edit mode.

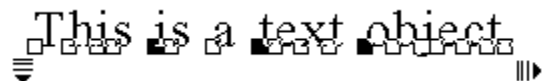
Small open squares, similar to freeform edit control points on objects, appear at the bottom left of each character.




The image shows the text "This is a text object." with small open squares (character control points) at the bottom left of each character, indicating it is in edit mode.

These character control points allow you to adjust the character spacing and the style of individual characters within a text object.

When you select a character control point, the point turns black. If you use this feature to adjust kerning, or how characters fit next to one another, press the Shift key and the movement of the selected characters will be constrained along the baseline.



The image shows the text "This is a text object." with character control points. The point under the letter 'i' is filled black, indicating it is selected.

You can drag the lower left control cone  to adjust leading (line spacing). Dragging the lower right control cone

 increases the spacing between the words and letters.

End/Join Styles Dialog Box

The End/Join Styles Dialog Box can be accessed by clicking on the Define button in the Custom Lines dialog box when the End/Join option is chosen. There you may choose the shape of line endings and line intersections, as well as the bevel angle when a beveled join is chosen.

EXPRESS Tips & Techniques on CD-ROM

With the EXPRESS CD-ROM in your CD drive, click on Tips & Techniques to display a button bar of helpful suggestions that will improve productivity and save you time and money. The list of Tips & Techniques is presented below.

- Accel-O-Draw
- Activity Manager
- Adding Text
- Arrowheads
- Color Filters
- Color Palettes
- File Management
- Help for Items
- Make Proportional
- Naming Objects
- Object Management
- Precise Adjustments
- Pushpins
- Quick Display Options
- Resizing Objects
- Right Mouse Button
- Save, Save, Save
- Size & Move
- Stacking Order
- Use Both Hands
- 4-Color Check List

Eyedropper



The Eyedropper style button allows you to save specific style elements from one object in EXPRESS and apply them to another. The Eyedropper stores the last saved style until you close EXPRESS.

Click on the Eyedropper with the Content menu button and select the element of an object that you want to save: All, Color, Fill, Line or Type.

To save any or all of these style elements, select the object and click on the Eyedropper with the left mouse button, or press Ctrl+R (or use the Save command in the Eyedropper menu). To apply the styles, select another object and give a click of the Eyedropper with the content menu button, or press Shift+R (or use the Recall command in the Eyedropper).

Saving Styles for Future Sessions

File History (Default Files)

Each time you save a default (.def) file in EXPRESS, the name and path of the file is saved. When you click on File and then Defaults, a list of the last four Default files saved in EXPRESS is displayed. To open any of these files, just click on the entry in the list. This list is saved and restored each time you start up EXPRESS.

File History (EXPRESS Files)

Each time you save a file in EXPRESS, the name and path of the file is saved. When you click on the File menu, a list of the last four files saved in EXPRESS are displayed at the bottom of the menu. To open any of these files, just click on the entry in the list. This list is saved and restored each time you start up EXPRESS. This feature provides the quickest way to resume work on a current project, and it can also save you from having to search for a recently-used file whose name you have forgotten.

File History (Palette Files)

Each time you save a palette (.pal) file in EXPRESS, the name and path of the file is saved. When you click on the Styles and then Color, a list of the last four Palette files saved in EXPRESS is displayed at the bottom of the menu. To open any of these files, just click on the entry in the list. This list is saved and restored each time you start up EXPRESS.

File History (Style Files)

Each time you save a style (.sty) file in EXPRESS, the name and path of the file is saved. When you click on Styles and then Style Bundles, a list of the last four Style files saved in EXPRESS are displayed at the bottom of the menu. To open any of these files, just click on the entry in the list. This list is saved and restored each time you start up EXPRESS.

Flyout Toolbars and Foldup Menus

Ten of the icons in the Toolbox are marked with indented triangles. When these icons are pointed on and the left mouse button is pressed and held, a flyout toolbar appears to offer options. (If the left mouse button is clicked instead of pressed and held, the default option in the flyout is automatically selected.)

A foldup menu is one currently displaying only its title, pushpin, and enlarge/reduce button. All of the EXPRESS dialog boxes that have pushpins, so that they can be arranged as foldup menus.

Here is an example of a flyout toolbar: When this button



(the effects tool) in the toolbar is clicked on, this flyout toolbar



is displayed, offering the effects of Merge, Blend, Bind text to shape, Extrude, and Warp.

Here is an example of a foldup dialog box:



This is a dialog box reduced in size by clicking on its minimize button. Their small size helps conserve screen space. Choose a dialog box with a pushpin



. Depress the pushpin with a mouse click. Click on the minimize button in the upper right.

Greeting Cards


The Greeting Cards activity library gives you a collection of cards for birthdays, holidays, and other special occasions.

You should center the card on the page before printing.

To center a card on the page:

1. [Select](#) the card.
2. Choose Align from the Arrange menu (or press Ctrl+N). A dialog box appears.
3. Choose Page reference and Center orientation and click on OK.

You can use the Break Apart command in the Arrange menu to ungroup the card, and then change the words and pictures to make a new card.

 **See Using Activities**

Help Keyword Search


If you are looking for help on a subject (e.g. four-color printing) rather than a command or tool, the keyword search facility is the quickest way to determine what help is available and how to get there. Pull down the Help menu and click on **Search for Help on** or if you are already in Help, click on the Search button.

Scroll down the list of topics available or type a keyword and click on Show Topics to display all of the topics cross-referenced to the keyword or topic selected. Select a topic and click on Go To to display the appropriate help screen.

Hiding and Unhiding Objects













The Hide and UnHide All commands in the Object Management submenu (accessed from the Edit menu) removes selected objects from view. Although hidden objects cannot be selected, edited, or manipulated, they are still part of your artwork. Use the Hide command to hide objects from view.

When finished, click on UnHide All to make visible all objects on the drawing area. (UnHide All does not affect locked objects.) To unhide individual objects, choose the Browser command.

 **See also: Object Browser**

Icon Identifiers in Browser and Viewer

The types of objects listed in the Object Browser and the Object Viewer can be identified by the icon that appears in the list.

Object Type	Icon	Named Object
Symbol #		S>object name
Text	T	T>object name
Chart	Chart	C>object name
Extrude		E>object name
Open Shape		O>object name
Closed Shape		C>object name
Picture (.WMF)	Picture	P>object name
Bitmap	Bitmap	B>object name
Image (.TIF)	Image	I>object name
Group		G>object name
Blend		B>object name
Hole Group		H>object name
Mask Group		M>object name
Text on Shape		T>object name
Warp Object		W>object name
Block	-	-
Multiple	-	-
None	-	-
 Browser / Object Management		
 Object Viewer in the Style bar		

Importing Files

The Import command in the File menu lets you import text files (TXT and DOC are the typical extensions) and clip-art images into EXPRESS from any of the following formats -- [PS](#), [EPS](#), [CGM](#), [DXF](#), [TIF](#), [WME](#), [WPG](#), [CDR](#), [BMP](#), or [DIB](#).

Click on the special file type to select it.

Go to the directory where the import file is located, click on a file name in the list, then click on OK. The Add Object cursor appears. Click the left mouse button to add the image into the EXPRESS drawing area at its default size, or [drag](#) the mouse to size a [bounding box](#) for the image.

Note: Text must be in ANSI or ASCII format to be imported into EXPRESS.

 **Converting file formats with Decipher**

 **See also: Defaults**

Interactive Editing of Text

If a text object is selected, the icon in the toolbox changes from Edit Freeform Shape to Edit Text Points. In this mode, you are editing individual characters within a text object.

To change the styles of individual characters within a text object:

1. Select the text object and select Freeform/Text Edit from the Draw menu, or depress the Content menu button and select Text Point Edit, or click on the Freeform Shape/Text Point Edit button in the Toolbox, or press Ctrl+P.

Small open squares -- character control points -- appear at the bottom left of each character, and two triangular spacing controls appear below and to the left and right of the text object.

2. The character control points can be selected individually, by Shift+click, or by the Block Select cursor (Ctrl+B). The selected control points fill, indicating that the characters they control can be given styles apart from the text object in which they appear. You can italicize words or letters, give them different fill and line styles, or change their typeface.

You can use this feature to adjust kerning (character fit) by selecting letters and moving them horizontally (either closer or farther apart). Press the Shift key and the movement of the selected characters will be constrained to either horizontal or vertical.

3. The triangular controls -- one pointing vertically, the other horizontally -- allow you to drag the text object and change its leading (vertical adjustment) and word and letter spacing (horizontal adjustment). Note that this is different from stretching a text object by dragging a center handle. These horizontal and vertical controls allow you to interactively change spacing, rather than by entering numbers in the Type Spacing dialog box.

When you have finished changing your drawing, click once on the right mouse button.

Intuitive Object Selection

An object in EXPRESS is selected by clicking on any of its visible parts. An object within a stack of other objects can be selected intuitively by clicking on the part of it that you can see.

To select a single object:

Point on a visible area of the object with the Pointer and click the left mouse button.

The selected object is surrounded by eight small squares, called object handles. These handles appear at each corner of an invisible rectangle that surrounds the object, and at the midpoint of each side. A ninth handle, in the shape of four arrows, appears at the center point of the object. Any previously selected objects are deselected. Whenever you add a new object to your Arts & Letters document, it is automatically selected.

An [open shape](#) or object with no [fill](#) must be selected by clicking on its outline.

Note: To select an object that is completely concealed by other objects, hold down on the Control key and point on the stack. Each time you click the mouse, a different object in the stack will be selected. Check the Style bar to see the name or the type of the currently-selected object.

Keyword Searching

A keyword is a generic name assigned to a symbol or to clip art in order to facilitate searches. One keyword can find many different symbols and clip art in EXPRESS. For example, the keyword "car" can find the following images: auto, automobile, Chrysler, Ford, wheels, etc. because the word "car" is not necessarily associated only with the word "automobile." In railroad terminology, a car is part of a train. In mining, it's a tool used for hauling. A broad context for keywords is more likely to result in finds suited to the user's more specific needs.

The keywords used in the Clip Art Find feature are of these types:


- Alphabetical keyword entries of a clip-art libraries
- Alphabetical keyword entries of symbols
- Symbols and their corresponding numbers
- Cross-referenced Clip-Art Manager and symbol names

Using the Clip-Art Manager

Locking and Unlocking Objects

The Lock and Unlock All commands in the Object Management submenu (accessed from the Edit menu) prevent selected objects from later being selected and manipulated. Use the Lock command to essentially "paste or tape down" an object on to the work area. You can then select, move, edit, etc. overlaying or overlapping objects without affecting locked-down objects.

When finished, click on Unlock All to make accessible all objects on the drawing area. (Unlock All does not affect hidden objects.) To unlock individual objects, choose the Browser command.

 **See also: Object Browser**

Merging Objects in EXPRESS

The Merge command in the Effects menu displays the Merge dialog box. Use this dialog box to cut holes and create clipping paths.

To cut a hole in an object:

1. Convert to freeform the hole-cutting object and the object to be cut by selecting each and choosing Cvt to Freeform from the Draw menu or by pressing F8.
2. Position the "hole" object on top of the other object by choosing Bring to Front from the Arrange menu or by pressing Ctrl+F.
3. Use Shift+click or Block Select to select the objects.
4. Choose Merge from the Effects menu.
5. Choose Cutout (Hole) and click on Apply.

If the top (hole) object only partially overlaps the bottom object, a hole will be created in the area of overlap.

To cancel the effect of a cutout, select the object and choose Break Apart from the Effects menu.

Note: The filling rule used with closed shapes can affect the result of a cutout command.

To create a clipping mask:

1. Select the object to be used as the "cookie cutter."
2. Place the object on top of the object or objects you want to clip and use Shift+click or Block Select to select all of the objects.
3. Choose Merge from the Effects menu.
4. Choose Clipping Path (Mask) and click on Apply.

The objects under the cookie cutter are clipped, and can be seen through the cutter. Any part of the objects not under the cutter are not drawn.

If the "cutter" only partially overlaps the other objects, the objects will be clipped in the area of overlap:

To cancel the effect of a clipping mask, select the object and choose Break Apart from the Effects menu.

Note: The filling rule used with closed shapes can affect the result of a clipping path command.

The Merge Dialog Box

Modifying Objects in EXPRESS

Objects created in EXPRESS can be modified to suit your needs.

1. Select the object. Eight [object handles](#) surround it.
2. Press Ctrl+P to edit it. If it is not a freeform object, first make it one by pressing F8. (Editable [Freeform Points](#) appear, which can be manipulated.)
3. Add a Handle by pressing F5.
4. Use the cursor to place the new handle anywhere on the drawing. Now you can [drag](#) the handle you added, and so bend the drawn line.
5. Press Ctrl+4 to turn on control handles (connected by a dotted line).
6. Grasp one of these handles to change the slope of the tangent at that point.
7. After modifying the drawing, click with the Content menu (right mouse) button in an open area to show the final appearance of the object.

Moving Objects

To move an object, [drag](#) it from one position to another. The object does not have to be selected (surrounded by [object handles](#)). A rectangular bounding box moves with the cursor; when the bounding box is in the desired position, release the mouse button and the object is redrawn in the new position.

To cancel a move while the bounding box is displayed on the drawing area, press Esc.

If a selected object is very small, it may be difficult to move the object. Instead of dragging the object, you may inadvertently drag an object handle, which will size rather than move the object. (Press Esc if this happens.) To avoid dragging an object handle, either deselect the object and just point on it then drag. A selected object may also be moved by holding both mouse buttons as you drag, or by [zooming in](#).

Using the Numeric Bar to Reposition Objects

Naming and Saving Colors

Before naming your own colors, you should examine some of the many ready-made colors in the color palettes provided with EXPRESS. The colors are grouped to help in your selection. For example, there is a palette for metallic tones (Metals.pal) and one for flesh tones (People.pal).

To start a new palette:

Hold down the content menu button on the Color style button (or click on Color from the Styles menu) and select New Palette. Respond yes to the "OK to clear color palette" message.

To load a new palette:

Hold down the content menu button on the Color style button (or click on Color from the Styles menu) and select Open.... Search the directories for a [color palette](#) file which has the extension .pal, and double-click on it.

To save a palette:

Hold down the content menu button on the Color style button (or click on Color from the Styles menu) and select Save As.... The Save Palette A dialog box appears offering the default extension of .pal for the filename you wish to assign to the colors showing in the current EXPRESS color palette.

To select from an existing color:

Click the left mouse button on the Color style button, check the Line and/or Fill boxes, then select the particular color to apply it to an object's lines or interior. Name your own color by clicking on the Color style button with the content menu button. Select the color model ([RGB](#), [CMYK](#), [Hues](#)), and mix the colors to the right as desired. Click on the Name button. The name you type in the resulting box will appear at the bottom of the displayed palette and will be saved with it if the document is saved.

New Document



The New button on the Style Bar performs the same action as the New command in the File menu. Clicking on this button clears the drawing area so you can start a new drawing.

When you click on the New button, you are prompted, "Save changes to (untitled)?" You can choose Yes to save the current drawing, No to clear the drawing area, or Cancel to keep the current picture on the drawing area.

Object Viewer

The Object viewer, found at the top of the Drawing Area, displays the type and the name of the object selected. A click of the left mouse button on the down arrow displays a list of the objects in the document, with the selected object (if there is one) highlighted. Click the Content menu button to display the Object Browser; press and hold the content menu button to display a content menu that allows you to choose among Browser, Lock, and Hide options.

Explanation of Object Viewer Icons

OLE (Object Linking and Embedding)

The graphics objects created by EXPRESS can be used in other applications and still be edited within EXPRESS.

Because it provides OLE objects, EXPRESS is called an OLE server. Applications that can support EXPRESS objects are called container applications. Any container application supporting the OLE (1.0 or 2.0) protocol can use EXPRESS' graphic objects.

OLE provides two methods by which EXPRESS objects can be incorporated in other programs which support OLE. These methods are called "linking" and "embedding."

A linked object in the container application has a "link" to the server, so that changes made in the server document automatically update all linked objects. On the other hand, an embedded object exists only within the container application. The container application allows you to double-click on the OLE object or provides a menu or some other way to select the embedded object and update it for that document by calling up the server application.

As for methods of use, generally speaking, the best source of information on how to use a server application's objects in another program will be in that other program's documentation. Consult your container application's documentation for information on how it uses OLE. More specifically, when a user Cuts or Copies an object from EXPRESS, EXPRESS puts, in addition to what the user requested, all the necessary information required for Linking and/or Embedding in the Windows Clipboard. This allows the user to "Embed" or "Paste Link" the graphics contained on the Clipboard in a Container Application. A "Cut" operation allows embedding only, whereas a "Copy" operation allows at least embedding and possibly linking, provided EXPRESS has an actual document loaded that the container application can link to.

EXPRESS can reference the objects that it creates for OLE by the actual user name for the object ("Dinosaur Arm" for example) or by the area that the object occupies on the screen. The type of referencing used is established in the Clipboard dialog box, either By Object Name or By Object Area.

In EXPRESS, the Select Area command defines OLE area frames. These frames can be viewed as windows which "look into the server document." The embedded OLE object frame can be sized and moved just as the Selected Area Frame can. If portions of an embedded object need not be displayed in the container file, then the server Select Area "window" can be moved or sized to change the display of the embedded data. Likewise, if extra room is needed to accommodate additional EXPRESS objects, then the Embedded Object frame size can be adjusted accordingly.

A linked OLE object frame cannot be moved or sized in EXPRESS. This is a limitation of OLE 1.0. However, EXPRESS objects themselves can be moved and/or sized and saved both within the EXPRESS document and within the container file.

Selecting and Copying OLE Objects and Areas

Open Collection Dialog Box

The Open Collection dialog box can be accessed through the Collections menu in either the Clip-Art Manager or the Activity Manager. A list of files with a YAL extension is displayed under the File Name window. To open a collection specify the file name, drive, and directory path and click on Open. The name of the collection you have chosen and the number of images available in that collection are displayed in the Collection Name window. Collections which are currently open are displayed in the Opened Collections window. To close a collection highlight the collection name and click on Close Collection.

Open Document



The Open button on the Style Bar performs the same action as the Open command in the File menu. Clicking on this button with the left mouse button displays the Open dialog box. Use this dialog box to open [GED](#) files.

Clicking once with the right mouse button on the Open button will display the [Import](#) dialog box, which allows you to import an existing file in a variety of formats. Clicking and holding the Open button with the right mouse button displays a context menu which provides you with the options to Import or Open an existing file.

If you forget to close your current work, don't worry: you will always be given a chance to save before proceeding.

Print Color

Keep in mind that the color on any monitor can never be an exact match of the final printed color. Even a perfectly matched color can acquire a different shade depending upon the brightness setting of your monitor or whether the day is sunny or dim, upon the amount of ink coverage on the printed piece, upon the kind of paper it is printed on, upon the amount of surrounding white space on the page, and upon many other factors.

For exact color matching, output your work to a color laser copier, and modify the colors in your EXPRESS document to suit your demands. For long runs of color work, take the color copy to a [four color](#) printer as a model to be matched. [Service bureaus](#) in most cities provide inexpensive color laser output if given a PostScript print file, such as can be created by EXPRESS.

Print Document



The Print button on the Style Bar performs the same action as the Print command in the File menu. Clicking on the Print button displays the Print dialog box which allows you to specify a variety of printing options.

Printing to a File

Printing to a file lets you print the composition you created in EXPRESS on someone else's printer or imagesetter.

When you choose the Print command, you can click on the To File button to print to a file. You tell EXPRESS the type of printer you plan to use to print the file, and you enter a file name up to eight letters long. The extension .PRN (which is not automatically assigned) is the usual extension given to a print file. Printing first to your hard disk and then copying the resulting file to a floppy disk will considerably speed the process.

Once transferred to a floppy disk, this file can be taken to another computer that is connected to the printer you want to use. You can then follow the instructions below to print the file from a DOS prompt. (See a DOS User's Guide for information on using DOS.)

1. Put the disk in a flexible-disk drive.
2. Log onto that drive.
3. Type COPY/B filename LPT1 and press Enter. (Instead of typing the word "filename", type the name that you gave to the file.)

Note: If you are printing to a serial printer, do not use the /B after the COPY command. Also, printing the file from a hard disk will shorten print time.

 **Print Files for Service Bureaus**

Private INI File

It is not necessary to make any adjustments to the .INI file unless you wish to customize the installation of EXPRESS.

The following section describes the purpose of each line in the private .INI file. The ALLETTER.INI file is located in your Windows directory with a backup copy in your EXPRESS directory.

[Express]

This line is the heading. It identifies which product the following lines are used for. Each new product will have its own heading in the ALLETTER.INI file.

Express=C:\EXPRESS

This line is used by the installation program to identify where the main program files are to be located. When updating or reinstalling EXPRESS, this entry identifies the default path and directory.

BackupPath=C:\EXPRESS

If Make Backup is selected in the SAVE, or SAVE AS dialog boxes, the directory specified above is where the backup files are saved. The file extensions are automatically renamed to .BAK instead of .GED so that they may be placed in the same directory as the .GED files.

Symbols=C:\EXPRESS\SYMBOLS

This line points to the directory in which INDEX.ALL and any available DLIBxx.ALL files are located.

Typefaces=C:\EXPRESS\TYPEFACE

This line points to the directory where Arts & Letters typefaces (DFONTxx.ALL) are installed.

Config=C:\EXPRESS\STARTUP.DEF

This line defines which file EXPRESS is to load as the default. The file name and even the suffix (.def) are arbitrary and can be changed as long as the file is specified in the above line. The directory can be anywhere on your system. The file that is loaded determines internal paths and settings. See the on-line Users Guide for details for how to save default settings.

Libraries=3

Library1=D:\EXPRESS\EXPRESS\CUSTOM*.yal

Library2=C:\EXPRESS\CUSTOM*.yal

Library3=C:\EXPRESS\CUSTOM\Curves.yal

This section relates to the Clip-Art Manager. The first line specifies how many of the library entries (described on successive lines) should be loaded into the Clip-Art Manager. Each line that follows can point to any location and load a specific file or all files in a directory by using standard wildcard conventions. The last line in this list tells the Clip-Art Manager which library to highlight as the default library when the Clip-Art Manager is displayed for the first time.

Activities=2

Activity1=D:\EXPRESS\EXPRESS\ACTIVITY*.yal

Activity2=C:\EXPRESS\ACTIVITY*.yal

This section is identical in purpose and operation to the previous section except that it refers to the Activity Manager.

Alternate symbols=D:\EXPRESS\EXPRESS\SYMBOLS

This line points to the alternate location where DLIBxx.ALL files may be found to supplement the original SYMBOLS= line. Unless all of the symbol data is installed on your local fixed-disk drive, EXPRESS will also look for symbol data in the alternate location specified, generally a CD-ROM drive or a network drive.

Alternate typefaces=D:\EXPRESS\EXPRESS\TYPEFACE

This line points to the alternate location where DFONTxx.ALL files may be found to supplement the original TYPEFACES= line. Unless all of the typefaces are installed on your local fixed-disk drive, EXPRESS will also look for typeface data in the alternate location specified, generally a CD-ROM drive or a network drive.

DemoPath=D:\EXPRESS\ARTSHOW

This line is used by the on-line Help system to find multimedia applications related to each specific

product.

ArtShow=D:\EXPRESS\ARTSHOW

This line points to the directory on the CD-ROM that contains the EXPRESS Art Show. If the path is left blank after the "=", the menu item is disabled. If the line is omitted, a default path is assumed.

Database=D:\EXPRESS\EXPRESS\USERGUID

This line points to the directory which stores multimedia applications that work with the Database menu in the Arts & Letters DRAW series of applications. If this line is omitted, a default path is assumed.

MMHelp=D:\EXPRESS\EXPRESS\USERGUID

This line points to the directory on the CD-ROM for the Users Guide and Tips & Techniques, which are called from the Help menu. If this path is left blank after the "=", the menu item is disabled. If this line does is omitted, a default path is assumed.

Index=INDEX.ALL

Lib=DLIB

Font=DFONT

These features are not implemented in this release.

DiskInstall=0

This line describes what type of media EXPRESS was installed from (diskette or CD).

AllowOldYALUpdates=0

This line affects the default restriction for updating YAL files from 3.12 versions and earlier. If this line is omitted, the program assumes a default of 0 and does not allow the update process to affect older YAL files. If this line is present and has a value of 1 the program turns off the security and allows you to update older YAL files.

ShowDuplicateYALs=0

This line controls how the Clip-Art Manager and Activity Manager load and list YAL files with duplicate library names. If this line is omitted, a default of 0 is assumed and the program will NOT list YAL files that have duplicate library names. If this line is present and has a value of 1 the program will list all entries. This feature is designed to accommodate installations where .YAL files may be stored on your local drive and on a CD-ROM or network disk drive. The program loads each library and compares it with all other libraries. If it finds a duplicate it lists the library with the most recent date stamp and ignores the others.

PSDriver=0

This line controls how EXPRESS handles printing to a Postscript Device. If this line is omitted, the program assumes a default of 0 and tries to supplement the printer driver with Arts & Letters specific features. If this line is present and has a value of 1 the program does not supplement the driver. This can be used as a correction for some PostScript printing problems but it limits the program in several ways. PostScript separations are turned off (which affects Screen angle settings, UCR for TIFFs etc.), and color output goes through Windows RGB color values instead of our CMYK color values which may cause color matching problems. This option is still under development and may be enhanced in the future.

MRUFile1=C:\EXPRESS\FLOWER.GED

MRUFile2=C:\EXPRESS\ANYFILE.GED

MRUDef1=C:\EXPRESS\STARTUP.DEF

MRUStyle1=C:\EXPRESS\STYLE1.STY

MRUPal1=C:\EXPRESS\PALETTES\CHROMA.PAL

This section lists the Most Recently Used of several Arts & Letters file types. It can list as many as four files for each type (FileN=EXPRESS files, DefN=Default files, PalN=Palette files, StyleN=Style files). If these lines are omitted, the program will use internal defaults.

Turning On an Opening Sound File

To play a wave file when EXPRESS starts up, you can add the following line to the Alletter.ini following installation. Use Notepad to open the Alletter.ini in your Windows directory and add the path and directory of the wave file you want to play. Once the wave file begins playing, you can click anywhere to cancel the

wave file and proceed with the next operation.
"MMSplashWave=c:\sounds\greeting.wav"

proc

Problem Report

Should you encounter any problems during the use of Arts & Letters EXPRESS, certain information is required before a Technical Support Representative can help you. You may find it more convenient to fax this information, in order to avoid the possibility of waiting on the telephone for the next available representative. The EXPRESS Problem Report form appears in a ready-to-fax format. Even if you do not have access to a fax machine, please print the form and fill it out before calling Technical Support.

Dr. Watson Log

Included with Windows, Dr. Watson is a utility that monitors the applications you are running. Dr. Watson must be started as an application after you start Windows and before you start any other application. In the event of an application error, the information contained in the Dr. Watson log file may be extremely useful. Many users place the Dr. Watson icon in their Startup group. If an application terminates, Dr. Watson automatically records the code that was running when the application failed and prompts the user for an explanation of what happened. Dr. Watson then automatically generates a file called DRWATSON.LOG in your Windows directory with a record of the error which will help our technical staff resolve the problem.

Please copy the DRWATSON.LOG from your Windows directory to a file and attach it to your e-mail message or copy it to a diskette. Also attach or include a copy of the file you were working on when the application error occurred. Our e-mail address is **support@arts-letters.com**. You can also mail the diskette to us or upload it to our BBS at (972) 404-8652.

The telephone number for Technical Support is (972) 661-8960; the fax number is (972) 661-5429.

 **Display Problem Report for EXPRESS**

Problem Report for EXPRESS

Hold down the right mouse button and click on **Make a Copy of this Text** to copy this form to the clipboard. Paste the form into any word processor or to print a copy, hold down the right mouse button and click on **Print this Topic**.

Page 1 of ___ pages

Date _____

Send to:

Computer Support Corporation
15926 Midway Road
Dallas, TX 75244

e-mail: support@arts-letters.com

Fax: (972) 661-5429

Mr./Ms. _____

Title: _____ Mail Stop: _____

Organization: _____

Street: _____

City: _____ State/Province: _____

Country: _____ Zip/Postal Code: _____

Telephone: () _____ Fax: () _____

EXPRESS version number _____ Serial number _____

OS/Windows Version _____

Current video driver and mode _____

Target Printer in EXPRESS _____

Description of the problem:


The steps necessary to reproduce the problem:

If your application terminated, we would appreciate copies of your Dr. Watson log file and the file you were working on so we can attempt to reproduce the problem.

Pushpins




Pushpins allow you to fix tools and dialog boxes on the screen for ready access. Click on the pushpin to fix a dialog box on the screen so that it will not vanish when OK or Apply buttons are pressed. Click again on the pushpin to release the dialog box.

 **See Flyout Toolbars and Foldup Menus**

Quick Display Options

In addition to the use of the [Accel-O-Draw](#) function, there are several options under Quick Display in the [View menu](#) to speed the redraw of your screen.

Holding down the Content menu button on  will display a menu showing these other options. Screen redraw is speeded if details of line and color are temporarily ignored. This is accomplished by toggling Outlines Only and Show Colors as Gray.

Quick Display also offers several other ways to speed redraw. They are detailed in the topics below:

- Display or Show Outline of Fills**
- Display or Show Outline of Wide Lines**
- Display or Show Outline of Bitmaps**
- Display or Show Outline of Smoothing**
- Object Caching On or Off**
- Object Cache Clear**

Raster Dialog Box

A raster is an image defined as a collection of pixels (dots). EXPRESS offers many ready-made raster patterns that can be used to give the interiors of objects different textures and effects. To display the Raster dialog box, click on the Raster option under Fill in the Styles menu. Scroll through the numbered list to select a raster pattern.

Reloading Collections

If you have closed all the current collections and need to reopen them, use the Reload Collections option in the Collections menu of either the [Clip-Art Manager](#) or the [Activity Manager](#). You do not have to know the location of the collections - selecting Reload Collections will automatically load all collections from the location specified in your ALLETTER.INI.

Please note that selecting this feature in either the Clip-Art Manager or the Activity Manager will reload both clip-art collections and activity collections.

Loading Collections from CD-ROM

If you have EXPRESS configured to read collections from your CD-ROM drive, the Reload Collections feature can be used to load collections which span multiple CDs. Simply open the Clip-Art Manager or the Activity Manager, insert the CD, and select **Reload Collections** from the Collections menu. All current collections will close and EXPRESS will open the collections on the CD currently in the CD-ROM drive.

Note: If EXPRESS has been installed to read collections from the CD-ROM drive, you may encounter problems when a CD other than the EXPRESS CD is in the CD-ROM drive. See "Troubleshooting Common Problems" for more information.

 **Troubleshooting Common Problems**

Rotating Objects

When you rotate an object using the [Rotate tool](#) in the toolbox, you can see the number of degrees the object rotates in the rotate button on the numeric bar at the bottom of your screen. The degrees change in one tenth degree increments as you move the mouse.

Rotating Two or More Objects in the Drawing Area

If you have rotated more than one object or picture in the Drawing Area, EXPRESS remembers how far each was rotated. To see how many degrees you rotated the last object, simply click on that object (or any others you have rotated) and see the degrees on the rotate button.

[Selecting](#) more than one object displays 0.0 degrees, but EXPRESS still remembers how much each object was rotated individually.

When you save the objects and exit or start a new drawing, EXPRESS will remember how far you rotated those objects when you open the document later.

Rotating Grouped Objects

If you [group](#) two or more objects, the **r** button in the numeric bar shows 0.0. Rotating that group changes the numeric bar display. When you [ungroup](#) that group, each object will show the new degrees of rotation in the numeric bar, with the previous degrees of rotation added to the latest degrees.

Direction of Rotation

Rotating clockwise (to the right) makes the number of degrees ascend or count from 0.0 to 360.0.

Rotating counterclockwise (to the left) makes the number of degrees descend or count from 360.0 to 0.0.

Rotating Imported Bitmaps

You may encounter problems when rotating imported BMP and TIFF files in EXPRESS. After rotation, a grey box may appear in place of the imported image. If you are using a PostScript printer, the rotated image will print correctly despite the display of the grey box on the screen. However, non-PostScript printers will print the grey box rather than the rotated image. To avoid this problem, you may want to convert the bitmap to some other format before importing into EXPRESS.

The Numeric Bar

Save Document



The Save button on the Style Bar performs the same action as the Save command in the File menu. When clicked with the left mouse button, the Save button saves the current document to the path and name shown in the title bar if the document has previously been saved. If the document has not been named, the Save Document As dialog box appears so you can give your document a filename.

Clicking once on the Save button with the right mouse button displays the [Export](#) Files dialog box, which allows you to export the current file in a variety of formats. Clicking and holding on the Save button with the right mouse button displays a context menu which provides you with the options to Export, Save, and give your document a new file name.

Saving Custom Clip Art

To save an image to the Clip-Art Manager, type the Image Name in the space provided. If the name is too long, the program will truncate the name but you can rename it using fewer characters by clicking on Images and Change Name/Keywords.

If you are building a database of images and will want to search the Clip-Art Manager using keywords, type the keywords in the space provided separated by spaces. For multiple word descriptions, use the underline character to "tie" the words together. Click on OK to save the image.

Note: If you have selected a duplicate name, the program will warn you that you are about to write over another image with the same name. You can proceed or cancel and choose another name.

Selecting/Copying OLE Objects & Areas

EXPRESS can link or embed either selected objects or selected areas of your EXPRESS document to other programs supporting OLE.

To select an object for linking or embedding in another currently-running application (e.g., PageMaker), first select the desired object. Both groups and multiple objects can be selected. Press Ctrl+C. Go to the container, or destination, application where EXPRESS object(s) will be placed. From that application's Edit menu, select Paste Special. Consult that application's documentation regarding how the object(s) can be linked or embedded.

To select an area of the EXPRESS document for linking or embedding in another currently-running application, select the area. This is done by clicking on Select Area in the Edit menu. Drag the resulting box to define the area. (This box can be redefined by dragging one of its sides or corners. Reposition it by clicking on Deselect in the Edit menu and starting over.) Click on Copy Area in the Edit menu. Go to the container application and click on Paste Special from its Edit menu. Paste the EXPRESS graphic. The placed object can be resized and moved in the container file.

Select Area can also be used in EXPRESS to print just the selected area.

OLE (Object Linking and Embedding)

Selecting Objects

To select a single [object](#), point within its boundaries and click the inside mouse button. Eight [object handles](#) appear around the object. A ninth, smaller handle marks the center point.

If an object is completely obscured by others, select it by pressing and holding the Ctrl key as you click the inside mouse button. EXPRESS will select each object in the stack, from top to bottom. The Style bar will display the name of the currently-selected object.

To select more than one object, use [Shift+click](#), [Block Select](#), or [Select All](#).

Objects selected using Shift+click can be moved and sized individually, but their styles (color, fill, line, and type) can be changed simultaneously.

Objects selected using block select or select all can be moved and sized as a temporary group.

Selecting Point Handles

To select a point handle, point on it with the freeform edit cursor and click. The point becomes solid-filled.

To select multiple point handles, use [Shift+click](#), [Block Select](#), or [Select All](#).

Selection Within a Group

You can select individual elements of any group by double-clicking on the group then clicking on each of its elements. Once selected, the object can be edited. For example, without ungrouping you can select an image that is part of a group and rotate it alone.

To select within a grouped object:

1. Double click on a group. The top-most object in the group that is underneath the cursor is selected. A single click can choose another object in the group. The object handles surround the selection and its specific styles appear in the Style Bar.
2. Change the styles or edit the shape of the individual element.

Note: When groups are nested within groups, the first double click selects the uppermost member. A single click selects other member groups of the larger group. Another double click selects elements within the member.

Setting Up Activities

There are many different activities in EXPRESS. Some of the activities should be put on tall (portrait) paper, and other activities should be put on wide (landscape) paper.

To change between tall and wide paper:

1. Choose Current Page from the View menu.
2. Choose Print Setup from the File menu. A dialog box appears.
3. Choose Portrait (Tall) or Landscape (Wide) Orientation. Click on OK in the upper right.

If you don't know which page orientation to choose, choose Portrait (Tall).. There are a lot more tall activities than there are wide activities. (Some of the activities tell you if they are tall or wide.)

To select activities:


1. Pull down the Draw menu and click on Activity Manager.
2. When the Activity Manager dialog box appears, click on Collections, then Open. Browse the directories for files with the YAL extension. Highlight and select the YAL files that appear in the upper window. Press Open and their names will appear in the lower Opened Collections window. When you have finished selecting activities, click on Done.
3. The Activity Manager dialog box will reappear with the selected Collections in the left box. Choose the Collection you want, and its contents will be displayed in the right window under "Activity."
4. Click on the activity you want, then Add. The pointer will change to the Add Object cursor and the dialog box will disappear. Place the Add Object cursor in the upper left hand corner of your screen and click. The activity will be displayed at Actual Size.

To print an activity:

1. Choose Print from the File menu. A dialog box appears.
2. Choose Current Page and click on the OK button.


Because the activities are pre-colored for you (except for the coloring pages), they will print out on your black and white printer with shades of gray for the colors. If you don't want the grays, you can turn off the color before printing, and then color the activity with crayons, markers, or colored pencils after printing.

To turn off the color in an activity:

1. [Select](#) all the objects by pressing Ctrl+A.
2. Click on the Fill button menu  with the Content menu (right mouse) button.
3. Under Named Fills, click on None.

Click on an activity name below to see more information about that activity.

 **Greeting Cards**

 **Stationery and Bulletins**

Setting Up a Printer

The Print Setup command in the File menu displays the Print Setup dialog box. Use this dialog box to choose a target printer. Note that this dialog is configured according to your printer and its drivers. The options displayed in this dialog will be different for each printer brand and type.

Point on a printer in the list and click the left mouse button. The printer name becomes highlighted. Choose the Page Orientation, Paper Source, and Paper Size.

Clicking on Options takes you to the standard Windows Print dialog boxes. Provided the printer supports the options, EXPRESS will use the Windows options that you choose.

Click on OK to select all of the options chosen here.

 **Print a Document**

Sizing from the Center of an Object

EXPRESS allows you to size an object away from its center point, either proportionally from a corner handle, or non-proportionally from a side handle. Select an object handle, press the shift key, and drag the handle.

Proportional sizing away from one corner handle (the default for proportional sizing) is done as above but without pressing any key.

Sizing Objects


Sizing Objects

To size an object, [select](#) it and [drag](#) an [object handle](#). A rectangular bounding box moves with the cursor. When the bounding box is the size desired, release the mouse button and the object is redrawn at the new size.

To cancel a size operation while the bounding box is displayed on the drawing area, press Esc.

Dragging the top, bottom, left, or right handles sizes the object non-proportionally; dragging a corner handle sizes the object proportionally unless you simultaneously press the Ctrl key. Pressing Shift while dragging any object handle sizes the object away from its center point rather than away from one side.

An object that has been resized non-proportionally can be restored to its default proportions using the [Make Proportional](#) command in the Arrange menu.

 **See Using the Numeric Bar**

Special Text Characters

EXPRESS includes a set of special text characters you can use with any of the Arts & Letters typefaces. (They can also be used with hardware typefaces -- TrueType, Type 1, etc.) These characters are the standard extended ANSI character set.

To enter special text characters in the Enter/Edit Text dialog box, press and hold the Alt key, then type the numeric code for the character desired.

For example, to add the currency symbol for the British pound, hold the Alt key and type the number 0163, then release the Alt key.

You must use the number keys in the numeric keypad.

À	à	Á	á	Â	â	Ã	ã
0192	0224	0193	0225	0194	0226	0195	0227
Ä	ä	Å	å	ª	Æ	æ	Ç
0196	0228	0197	0229	0170	0198	0230	0199
ç	È	è	É	é	Ê	ê	Ë
0231	0200	0232	0201	0233	0202	0234	0203
ë	Ì	ì	Í	í	Î	î	Ï
0235	0204	0236	0205	0237	0206	0238	0207
ï	Ñ	ñ	Ò	ò	Ó	ó	Ô
0239	0209	0241	0210	0242	0211	0243	0212
ô	Õ	õ	Ö	ö	°	Ø	ø
0244	0213	0245	0214	0246	0186	0216	0248
ù	Ú	ú	Û	û	Ü	ü	
0217	0249	0218	0250	0219	0251	0220	0252
ÿ	ß	¿	¡	“	”	”	”
0255	0223	0191	0161	0145	0146	0147	0148
		¢	£	¤	¥	§	©
0150	0151	0162	0163	0164	0165	0167	0169
™	°	¹	²	³	¼	½	¾
0153	0176	0185	0178	0179	0188	0189	0190

Specifying Extrude Options & Values

The Specify By setting allows you to select one of two methods of interactively modifying the extrusion. The numeric values of the extrusion depth and vanishing point position are automatically updated as you drag parts of the extrusion interactively. You can also enter values directly into the boxes (or use the scroll arrows) and the extrusion will be changed just as if you had dragged it with the mouse.

Trackball, the first method of interactively adjusting an extrusion, acts as if the extrusion were floating within a transparent sphere. Dragging anywhere on the extrusion has the same effect as if you were to place your finger on the trackball there and rotate it. You can rotate the extrusion up to 360 degrees in any direction in space. While dragging, a wireframe box is displayed; if you are unsure whether you are looking at the front or the back of the extrusion, release the mouse button to display the solid box again.

Holding down Shift and then dragging the trackball drags the trackball and extrusion on the page without changing the rotation.

In Trackball mode, dragging one of the four handles on the front face of the extrusion proportionally sizes both the front and back faces of the extrusion. Dragging one of the four handles on the back face of the extrusion changes the depth of the extrusion (the distance between the front and back faces). In trackball mode, there is no vanishing point.

Perspective, the second method of interactive adjustment, does not allow you to rotate the extrusion in 3D space, but allows you to change the size and placement of the front and back faces, either directly or by moving the vanishing point of the extrusion.

Perspective mode allows the back face to be smaller than the front face, so that the extrusion appears to recede to a vanishing point. In Trackball mode, the front and back faces have the same size.

You can switch from Trackball to Perspective mode and back, and the appearance of the extrusion will revert to the state that it was in when you were previously in that mode. In both modes, the same number of Undo levels are available as in freeform drawing/editing and in Warp/Perspective, so you can Undo trackball rotations, vanishing point movements, etc.

Reset lets you undo your extrusion to the original default setting for the mode in which you are currently working (Trackball or Perspective).


Show Vanishing Point toggles display of the vanishing point lines and handles when in Perspective mode.

X: lets you change the x coordinate (horizontal position) of the vanishing point.

Y: lets you change the y coordinate (vertical position) of the vanishing point.

Depth lets you change the depth (thickness) of the extrusion. (Depth does not move the vanishing point.)

Stacking Order

The Stacking order command in the Arrange menu (or the second tool under the Arrange flyout ) allows you to change the order (front to back) of selected objects.

The command displays a dialog box listing all of the objects currently in your document. You highlight one or more of the listed objects and choose the To Front or To Back button to restack them.

You can also select (highlight) one or more objects in the list, then, without pressing the mouse buttons, point the Stacking Order cursor BETWEEN the objects where you want the selected objects to be moved.

Show Illustration

Click the mouse at the desired position. The Stacking Order dialog box gives you great flexibility in changing the stacking order of objects.

Object Browser

Arranging Objects


Stationery and Bulletins

The Stationery and Bulletins activity library gives you borders and pictures you can put on a page to create special stationery and bulletins.

You should center the activity on the page before printing.

To center an activity on the page:

1. [Select](#) the activity.
2. Choose Align from the Arrange menu (or press Ctrl+N). A dialog box appears.
3. Choose Page reference and Center orientation and click on OK.

 **See Using Activities**

Styles



When you click on the Styles button you see a list of names that indicate unique combinations of fill color, line color, back fill color, fills, lines, and type. Custom styles are also accessible through the Style Bundles command in the Styles menu.

You can click on one of these existing styles to apply it to a selected object, or create your own combinations of these styles and name them for use in future EXPRESS sessions.

The most basic use of the Custom Styles dialog box is to select none for no fill or solid.

To create your own custom style:

1. Click the Content menu button on the Style button.
2. In the Fills Palette dialog box, change any styles desired and click on Name.
3. Type in a name (up to 22 characters) and click on Name. The style is saved.

Existing custom styles can be renamed or deleted by the above procedure.



The Custom Styles Dialog Box

Text Point Editing



Click on the Text Editing icon or pull down the Draw menu and click on Freeform Text Editing to change the attributes or position (kerning) of any character in a block of text.

The Freeform Editing icon in the Toolbox changes to the Text Point Editing icon when you select a text object

To change the kerning or attributes of individual characters within a text object click on the Text Point Editing icon or hold down the Content menu (right mouse) button and select Point Edit.

A small open square appears at the bottom left of the character it controls. When you select these character control points -- individually, by Shift+click, or by the Block Select cursor (Ctrl+B) -- the selected squares become solid indicating that these characters can be given different attributes (color, typeface, line weight, etc.) from the other characters in the text object. If you use this feature to adjust kerning (character fit), press the Shift key and the movement of the selected characters will be constrained along the baseline.

You can [drag](#) the lower left control cone to adjust leading (space between lines). Dragging the lower right control cone adjusts overall word and letter spacing.

Troubleshooting Common Problems

This section lists some of the most commonly asked technical questions about Arts & Letters EXPRESS.

Why isn't my printer in the list of printers in the Print Setup dialog box and in the Custom Type dialog box?

In the Print Setup dialog box, EXPRESS is able to display printers made available to it from Windows. You can add more printers to the list by:

1. Selecting the Control Panel from the Program Manager then the Printers icon.
2. In the Printers dialog box, click on Add>>.

The Printers dialog box expands to show the list of printers.

If you find your printer name in the list of printers, click on install and follow the instructions. You may need to insert one of your Windows installation diskettes.

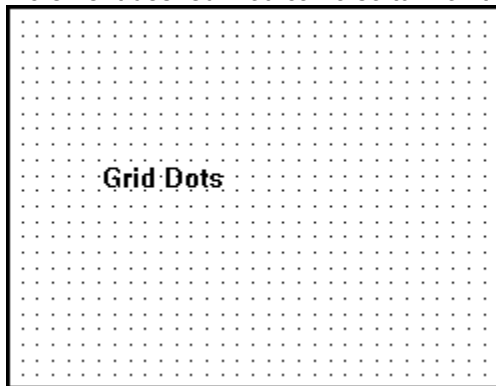
Additionally, EXPRESS can display and use additional fonts installed on your computer. In the Source box found in the Custom Type dialog box, you can select the current printer and view all the fonts available to it. These include True Type fonts and printer fonts.

For More information about printers, see your **Windows User's Guide**.

Why are tiny black dots all over my screen?

EXPRESS has a drawing "grid" that allows you to measure objects as you size and place them in the drawing area. This grid is similar to the markings on graph paper and serves a similar purpose.

EXPRESS' grid can be adjusted to several increments. You can make these adjustments by selecting the View menu and choosing Options. From the Viewing Options dialog box you can choose the grid increment desired. You can also turn off the display of the grid from this dialog box.



When I print a document to a high resolution printer, such as a 1200 dpi Imagesetter, why do some or all of the lines disappear from my drawing?

This is the result of a default setting in the Line Styles dialog box.

The default setting for line width is "hairline," or 0.0 points. Since a hairline is the smallest possible line width a printer can produce, the exact measurement of the width varies from printer to printer. A hairline on a 300 dpi laser printer will appear thicker than one produced on a 600 dpi laser printer, and a hairline produced at 1200 dpi will be barely visible if not at all.

To increase the weight of a line to be imaged at high resolution, change its width in EXPRESS from 0.0 to a greater number.

Why does a black line run vertically through my drawing area?

EXPRESS' drawing area is divided into pages. Each of these "black lines" represents a page border. If you select the View menu and choose All Pages, you can see the exact number of pages available for your document. Depending upon your page and document precision settings, you could have four or six pages, as well as ten times that amount.

The non-printing margin does not show in the drawing area; in other words, the page border lines show the "live area," or the actual, printable area.

How can I delete GEDs without leaving EXPRESS?

EXPRESS provides a method for deleting documents without leaving the program. To delete a document:

1. Select Open from the File menu.
2. Click on the document name to highlight it.
3. Select the Delete File key, and respond to the dialog boxes.

Files can also be deleted through the Windows File manager. The File manager and its operation is discussed in full in the Window's User's guide.

If I create a GED at one screen resolution (such as 800 x 600), then later edit the document at another (such as 1024 x 768), will I notice any difference in my drawing? Will I loose line weight, fills, etc.?

Because Arts & Letters does not save screen resolution information, you can work on your GEDs at any screen resolution and still have the output you specified from your printer.

At a lower screen resolution, the drawing will appear "fuzzier." However, the final output depends upon printer resolution, which is not related to screen resolution. Arts & Letters prints at the highest resolution specified by your output device.

Line weights and fills will not change. If you specify a line of 6 points, a 6 point line will print on your printer.

What is a YAL file?

Files with the .YAL extension are files EXPRESS uses to store and organize clip-art. (Each YAL file is a clip-art collection.) When you access clip art from the Clip-Art Manager, you are selecting clip art images stored in YAL files (or clip-art collections).

YAL is simply the default extension for this type of file. When you create your own clip-art collections, you can assign them any extension you wish. If you do, however, EXPRESS will not automatically load these files in the Clip-Art Manager with YAL files.

What are DEF files?

Files with the .DEF extension are files that store defaults for EXPRESS. EXPRESS comes with two default files: Startup.DEF and Chart.DEF, but you can change settings in EXPRESS and save these personalized settings either in the standard Startup.DEF or one of your own naming.

For example, when you open EXPRESS, the default fill color for objects is cyan, line weight is 0.0 points, and the fill pattern is Solid. These and other settings for color, line weight, fill patterns, type styles, viewing preference, etc. can be changed.

When you use the automatic charting feature, EXPRESS' Chart.DEF determines the type of chart, colors, and other elements that will be used, until you specify otherwise.

DEF files

What is an ALL file?

Files with the .ALL extension are those that organize EXPRESS symbols.

How do I find Symbols?

The Clip-Art Manager provides a complete list of all the symbols available in Arts & Letters. You can choose to show a thumbnail representation of these symbols at the bottom of the Clip-Art Manager dialog box (accessed by pressing Ctrl+M or Enter) in order to assist in identifying the symbol you want. A powerful [Find](#) function also helps you get to the symbols by searching on the keywords you enter.

Why does my computer show "Out of Memory" when I run EXPRESS?

EXPRESS requires a minimum of 2 megabytes of RAM memory to function; if you have less, EXPRESS will not operate. RAM of 4 megabytes is recommended, and 8 megabytes provides even better performance.

Why can't I select some of the commands I see in menus?

When EXPRESS cannot execute a command on an object on the drawing area, that command appears on the pull-down menu as gray and cannot be selected. For example, if you select a circle shape and pull down the Arrange menu, the Break Apart command cannot be selected. Break Apart cannot be applied to an object unless the object is composed of a group of lesser objects. For comparison, select a clip-art image and pull down the Arrange menu.

Why does Help disappear when I start to work in the drawing area?

The window does not actually disappear. It is still open, but it is "beneath" the active window, in this case, the EXPRESS window. Microsoft Windows allows you to overlap or overlay application windows, one on top of the other.

You can toggle between open windows by pressing **Alt+Tab**, but to keep the Help window visible while you use EXPRESS, select **Always On Top** from the Help Window's Help menu.

My work now takes up the whole screen -- How do I get the controls to reappear?

This occurs if you choose Full Screen from the View menu or press Ctrl+7. The Full Screen view allows you to make screen captures of your work without any EXPRESS controls visible in the picture.

To quit the Full Screen view, press **Alt+V** to see the View menu and change the view level, or press **Ctrl+7** to return immediately to the previous view level.

Why doesn't a 2 x 2 inch box drawn on the screen actually measure 2 x 2 inches on the screen?

The Numeric bar indicates the exact width (w) and height (h) of the currently selected object. When you print the object on your laser or dot matrix printer, it will measure exactly 2 x 2 inches, though the represented size on the screen might not be 2 x 2 inches.

EXPRESS cannot control monitor size or resolution. The monitor could be 9, 11, or 17 inches, and the same object will appear to be a different size on each monitor type.

Because of the differences between monitor types, video cards, and resolutions, EXPRESS approximates the size for layout purposes. To ensure that your object is sized to your needs, use the grid markings or observe the x and y windows in the numeric bar as you size the object.

I can't print my document. Why?

Is your printer cable connected properly?

Your printer should be turned on and "on-line." Also check your paper supply and toner, ink, or ribbon, depending on your printer.

Ensure you are using the appropriate printer driver for your printer. Try printing from another Windows product that has not given you trouble. In general, EXPRESS can print to any device accessible through the Windows Print dialog box.

You should be able to see your printer name when you select the Printer icon from the Control Panel. See your Windows User's Guide about installing printer drivers if the name does not match or is missing.

How can I access fonts other than those provided with EXPRESS?

There are many fonts on the market that can be used with EXPRESS. For example, PostScript and TrueType are popular font systems supported by EXPRESS.

EXPRESS accesses the font names from the printer driver currently selected for EXPRESS. In the Custom Type dialog box, accessible by clicking on with the Content menu (right mouse) button, select the Printer name button for the fonts available for the selected printer.

When I try to load a file or bring a clip-art image onto the screen, why do I get an error message stating that the symbol library cannot be found?

EXPRESS uses a proprietary symbol format for many of the clip-art images. This technology minimizes file size and speeds up loading.

If, during the installation procedure, you chose either the recommended installation or the Disk & CD installation for EXPRESS and included the Basic Symbols option, these symbols will be located on your hard drive. This means that EXPRESS will always be able to find the symbols when a file is loaded or a clip-art image is added to the drawing area.

If, however, EXPRESS was not installed using either of the above installation options, the symbol data is not on your hard drive and must be read from the EXPRESS CD-ROM. This means that the EXPRESS

CD-ROM must be in your CD-ROM drive when you request those symbols. If a CD other than the EXPRESS CD is in the CD-ROM drive when you try to load a file or bring an image onto the screen from the Clip-Art Manager, EXPRESS will not be able to access the required symbol data, and a warning message will appear.

You have three options:

1. **Abort** terminates the operation you were just performing, either loading a file or adding a clip-art image.
2. If you choose to **Retry** the operation, you should first insert the EXPRESS CD in your CD-ROM drive, then click on Retry. The image or file should load correctly.
3. If you choose to **Ignore** the error message, the image or file will continue loading even though EXPRESS does not have all the necessary information. The symbols which cannot be found will be replaced with rectangles and will print as rectangles unless you insert the EXPRESS CD in your CD-ROM drive before you print.

To avoid this warning message, simply place the EXPRESS CD in the CD-ROM drive before attempting to load clip-art images or files that require EXPRESS to access the EXPRESS CD.

You may want to reinstall EXPRESS using either the recommended installation or the Disk & CD installation.

When I duplicate a clip-art image, why doesn't the duplicate display correctly?

To help minimize file size and speed up loading and saving time, EXPRESS uses a proprietary symbol format for many clip-art images. This technology minimizes file size and speeds up loading and saving procedures.

If you installed EXPRESS using either the recommended installation or the Disk & CD installation and included the Basic Symbols option, these symbols will be located on your hard drive. This means that EXPRESS will always be able to find the symbols when a file is loaded or a clip-art image is added to the drawing area.


If EXPRESS was not installed using either of these installation options, the symbol data is not on your hard drive and must be accessed from the EXPRESS CD-ROM. This means that the EXPRESS CD must be in the CD-ROM drive in order for EXPRESS to access those symbols. If you insert a CD other than the EXPRESS CD into your CD-ROM drive while you have clip-art on the screen, EXPRESS will not be able to access the symbol data. The clip-art images already on the screen will not be affected because their symbol information has been stored in memory. They will still display correctly and can even be manipulated. Once you try to duplicate one of the images, however, EXPRESS will not be able to locate the necessary symbols, and the duplicate image will display as a group of rectangles.


To solve this problem, place the EXPRESS CD back into the CD-ROM drive and perform a screen redraw by pressing **F12**. To avoid this problem in the future, you may want to reinstall EXPRESS using either the recommended installation or the Disk & CD installation and include the Basic Symbols option.

When I try to open the Clip-Art Manager or the Activity Manager, why do I get a message stating that EXPRESS is unable to load the collections?

EXPRESS will load all collections from the location specified in your ALLETTER.INI file. If this location is the CD-ROM drive, EXPRESS will load all collections from the CD currently in the CD-ROM drive.

If you take the Arts & Letters CD out of the drive and replace it with another CD, and then try to open either the Clip-art Manager or the Activity Manager, EXPRESS will not be able to access the required collection data and a warning message will appear. You have two options:

 To cancel the operation you were just performing, click on the **Abort** button.

 To continue with the operation, click on the **Reload Collections** button. This will load all collections from the location specified in your ALLETTER.INI file. If this location is the CD-ROM drive, EXPRESS will load all collections from the CD currently in the CD-ROM drive.

To avoid this message in the future, make sure you have the appropriate CD in the CD-ROM drive before you go to open the Clip-Art Manager or the Activity Manager.

Note: You may see this message if you are trying to load collections from multiple Arts & Letters CDs.

You should keep the Arts & Letters CD you were using in the CD-ROM drive until after you have opened the Clip-Art Manager or the Activity Manager. Once you are in the Clip-Art Manager or the Activity Manager, you can then replace the Arts & Letters CD with another CD. If you have EXPRESS configured to read collections from CD-ROM, click on Reload Collections to unload the current collections and load the new collections from the new CD.

When I try to select a thumbnail, collection, or image in the Clip-Art Manager or the Activity Manager, why do I get a message stating that EXPRESS is unable to load the file?

EXPRESS will load all collections from the location specified in your ALLETTER.INI file. If this location is the CD-ROM drive, EXPRESS will load all collections from the CD in the CD-ROM drive.

If you take the Arts & Letters CD out of the drive and replace it with another CD while you are in the Clip-art Manager or the Activity Manager, EXPRESS will not be able to access the required collection data. If you try to select any thumbnails, collection names, or image names, a warning message will appear. When you click on **OK** in the message dialog box, the Clip-Art Manager or Activity Manager will display with no collections loaded. To reload the collections formerly in the Clip-Art Manager or the Activity Manager or to load new collections from another CD, place the appropriate CD into the CD-ROM drive and select **Reload Collections** from the Collections menu.

To avoid this message in the future, make sure you have the appropriate CD in the CD-ROM drive before you try to select thumbnails, collections, or images.

Tutorials

Several easy lessons designed to familiarize you with EXPRESS are provided on-line. One of the most important of these is the drawing tutorial.

 **Sample Drawing Session**

proc

Undercolor Removal

Undercolor removal (UCR) is a method of adjusting the Cyan, Magenta, and Yellow percentages of a bitmap image in relation to Black, for process color separations. It affects only bitmaps.

A bitmap imported into EXPRESS is in RGB (red, green, blue) format with no pure black. When the bitmap is separated into CMYK for 4-color printing, there will be no true black, and the K (black) separation will be blank. Black in the bitmap will be represented, instead, by equal percentages of cyan, magenta, and yellow. This mixture of three colors to represent black can be unsatisfactory, especially if the CMY "black" appears muddy. Undercolor removal replaces equal percentages of cyan, magenta, and yellow with an equal percentage of black.

EXPRESS includes several controls that let you adjust how this replacement occurs, but finding the optimum UCR settings for a given image is almost an art form. The default UCR settings in EXPRESS are the result of much experimentation and will produce satisfactory results for the majority of images.

The undercolor removal dialog box includes sections for Gray Replacement and Gray Balance.

Gray Replacement

Starting Density - tells EXPRESS to ignore a certain percentage of cyan, magenta, and yellow, and only make adjustments to the amount of the colors above that percentage.

Gray Removal - after EXPRESS determines the common percentage of cyan, magenta, and yellow above the starting density, the gray removal percentage tells EXPRESS how much of that common percentage to remove from each color.

Black Generation - after EXPRESS has calculated and removed the specified amount of cyan, magenta, and yellow, the Black Generation percentage tells EXPRESS how much black to add to replace the removed colors.

Gray Balance

The gray balance percentages let you adjust the gray removal amounts. Normally EXPRESS will determine a common percentage of cyan, magenta, and yellow above the starting density and remove 100% of that amount. You can specify different removal percentages for cyan, magenta, and yellow in the Gray Balance boxes.

Adjusting the gray balance can compensate for an image that is incorrectly tinted.

User's Guide

The Arts & Letters User's Guide is provided in two formats; (1) as on-line document and (2) formatted for printing as a book. To print the manual, just click on the User's Guide Print icon in the Arts & Letters program group. You can print a page, a chapter or the entire book unattended to any printer supported by Windows.

But before you print over 200 pages, consider the advantages of the on-line version of the User's Guide.

With the User's Guide on-line, you can:

- Access the information instantly using the on-line index.
- Full-text search a chapter or the entire User's Guide by subject.
- Copy, edit and paste the text into a word processor document for preparing training manuals.
- Annotate the User's Guide. Add your own notes, comments and explanations to the text for ready access.
- Bookmark topics for a specific project or training course.
- Each copy of the User's Guide contains the very latest information about the product, new features and enhancements.

Note: The EXPRESS User's Guide is not available unless you have run install.exe from the CD and the EXPRESS CD is in the CD-ROM drive.

Using Activities

The Activity Manager gives you instant access to useful information. There are many categories of information accessible through the Activity Manager:

Greeting Cards -- Contains 10 pre-made greeting cards that you can easily personalize and two templates for creating your own.

Special Effects - Text -- Contains special effects created from various type styles. Using the Replace feature of Enter/Edit Text dialog box, you can replace the type in the examples with words of your own.

Stationery & Bulletins -- Contains 10 designs for stationery and bulletins that you can personalize and print.

Illustrations -- Provides two collections, containing samples of artwork composed using EXPRESS: B&W (11) and Color (8). Seeing how others have used EXPRESS can give you ideas of your own.

 **Setting up Activities**

Using Editor 3.12 Accelerator Keys

The accelerator keys from previous versions of the Graphics Editor can be used with EXPRESS by modifying the ALLETTER.INI file.

To change the accelerator key:

1. Select Run from the File menu in the Program Manager and type ALLETTER.INI.
2. Next search for the [EXPRESS] section and add the line 30Style=1 below the EXPRESS config line.
3. Save the changes to your ALLETTER.INI file from the File menu. Your next session of Arts & Letters will include the accelerator keys from version 3.12.

Note: If you are using the 3.12 accelerator keys, the Content menu (right mouse) button functions designed for the new version will be reversed. After the above change in your ALLETTER.INI file, the Content menu button will access the named styles and the left mouse button will access the custom style.

Using Help

Remember that your first source of help should be the [Hint Line](#) at the bottom of your screen. It will give you information about the item currently under your cursor.

Another quick access to help for tools or commands on the drawing area is Help for Items.

To view help for a tool or command:

1. Choose Help for Items from the Help menu, or press the F1 key.
The Help cursor appears.
2. Click on a tool or choose a command. A help window appears, displaying information about the chosen tool or command.

You can use the controls in the help window to see help on other topics. When done looking at the help information, pull down the File menu in the help window and choose Exit.

To search for a topic or keyword:

1. Choose Search for Help on from the Help menu.
The Search dialog box appears.
2. Click on a topic or type a keyword to see if the topic is cross-referenced in Help.

For additional information about any of the items in the Help menu, click on F1 and with the Help cursor, pull down the Help menu and select any entry in the menu.

Using Symbols

The Symbols command in the Draw menu displays the Symbols dialog box or click on the Library icon to display the Resources flyout.



Click on the second tool to display the Symbol dialog box with 65 scrolling symbols or enter a symbol number. If you are working from the optional **Clip-Art Handbook** (available from your distributor for a nominal cost plus shipping & handling), you can enter a symbol number in the Number box or click on one of the symbols displayed in the dialog box. (EXPRESS provides access to all symbols and clip art through the [Clip-Art Manager](#).

Click on Add. The Add Object cursor appears. Place the cursor where you want the upper left of the symbol to appear. Click the mouse to have the symbol appear at its default size, or [drag](#) the mouse to size a [bounding box](#) for the symbol.

If a symbol is currently selected in the document when you choose the Symbol command, you can enter a number and click on Replace to replace the selected symbol with the new symbol. The new symbol will draw at the size and proportions of the symbol it replaces.

You can also use the [Make Proportional command](#) to redraw the new symbol at its proper proportions.

Using Text (Ctrl+T)



The Text command in the Draw menu or the Text tool in the toolbox displays the Enter/Edit Text dialog box for entering text and editing existing text.

To enter new text, paste or type up to 5,000 characters into the Enter/Edit Text dialog box and click on Add. The Add Object cursor appears. Place it where you want the upper left-hand corner of the words to appear. Click the mouse to have the words appear at their [default](#) size, or [drag](#) the mouse to size a bounding box for the words.

To edit words, first select the words in the drawing area and then either click on the Text tool or click the Content menu (right mouse) button. The selected words appear in the Enter/Edit Text dialog box. Click on Replace to replace the old words in the drawing area with the edited words from the dialog box.

Choosing the All Upper option places the words into the drawing area in all Capitals; choosing All Lower places the words in the drawing area in all small letters.

A click of the Content menu button on this button  allows you to specify the type styles of selected text.



The Enter/Edit Text Dialog Box



Modifying Text within a Text Object



Text Attributes



Special Text Characters

Using the Activity Manager



Click on the Library icon to display the Resources flyout.

Click on the third tool (light bulb) to display the Activity Manager dialog box.



The left-hand list box lists the names of the EXPRESS activity Collections. Click on a name in the left-hand Collection list. The right-hand list (Activities) displays the names of all of the activities in the library.

Click on a name in the right-hand list, then click on Add. The Add Object cursor appears. Place the cursor where you want the upper left of the activity to appear (usually at the upper left corner of the drawing area). Click the left mouse button, and the activity appears.

Some of the activities should be ungrouped before doing the activity. You can use the Break Apart command in the Arrange menu to ungroup activities, or just select the group and press Shift+G. (You can tell if something is a group by [selecting](#) it. If it is a group, the object name in the Style bar will be "Group" or there will be a "G>" in front of its name.)

Note: Many of the activities are designed for the Current Page viewing level. Either before or after adding the activity to the drawing area, pull down the View menu and choose Current Page, or press Ctrl+2.

Note: If EXPRESS has been installed to read collections from the CD-ROM drive, you may encounter problems when a CD other than the EXPRESS CD is in the CD-ROM drive. See "Troubleshooting Common Problems" for more information.



Setting Up Activities



Troubleshooting Common Problems: Collections

Using the Clip-Art Manager (Ctrl+M)



Clicking on the Clip-Art icon displays the Clip-Art Manager dialog box, as does clicking on the Clip-Art Manager command in the Draw menu. For even quicker access, press the **Enter** key.

In the dialog box the left-hand list box lists the names of the currently-open EXPRESS clip-art collections.

Click on a collection name in the Collection list. Note that an **(i)** to the right of a collection name indicates a collection of iconic symbols. The right-hand list (Image Name) displays the names of all of the clip art in the collection.

Click on a name in the right-hand list, then click on Add (or just double-click on either the image name or its Thumbnail). To keep the dialog box on your screen, drag the Thumbnail image into the work area. The Add Object cursor appears.

Place the cursor where you want the upper left of the clip-art picture to appear. Click the left mouse button to have the symbol appear at its default size, or drag the mouse to size a bounding box for the symbol.

The menus in the Clip-Art dialog box:

Collections - displays options for opening, closing and reloading clip-art collections. Selecting Open displays the Open Collection dialog box, where you can choose from files with a YAL extension. The Reload Collections menu option comes in handy if you have closed all the current collections and need to reopen them or if you are loading collections which span multiple CDs. You do not have to know the location of the collections - selecting Reload Collections will automatically load all collections from the location specified in your ALLETTER.INI. Please note that this feature reloads not only clip-art collections but activity collections as well.

Edit - allows you to copy the highlighted image (without placing it in your drawing area) for Object Embedding into another application.

Images - allows you to rename an image, give it a new keyword, or delete it.

Thumbnails - allows you to hide (remove) the scrolling thumbnails at the bottom of the dialog box or to reduce the dialog box to the thumbnails alone. This abbreviated view will allow you to keep the Clip-Art dialog box open while increasing the visible drawing area. Update allows you to generate thumbnails for new collections of clip art. The default is 16 colors which is adequate for viewing purposes while conserving storage.

Note: If EXPRESS has been installed to read collections from the CD-ROM drive, you may encounter problems when a CD other than the EXPRESS CD is in the CD-ROM drive. See "Troubleshooting Common Problems" for more information.

Accessing Clip Art Using Find

Converting Editor Clip-Art Collections and Creating Thumbnails

Keyword Search

The Clip-Art Manager Dialog Box

Using the Clip-Art Manager with Other Applications

Reloading Collections


Troubleshooting Common Problems: Symbol Libraries

Troubleshooting Common Problems: Collections

Using the Clip-Art Manager w/ Other Apps

You can use EXPRESS' Clip-Art Manager with other applications such as Word Perfect, Microsoft Word, PageMaker, etc. The Clip-Art Manager can be displayed for easy access while you are using these applications. For example, if you are preparing a newsletter and need a clip-art image, flourish, or border, you can search the collections for the image you need, copy it to the clipboard, then paste it into the application desired.

To use EXPRESS' Clip-Art Manager interactively with other applications:

1. Click on the **Minimize** button  to minimize the EXPRESS window.
2. Press the **Enter** key to display the Clip-Art Manager.
3. Pushpin the Clip-Art Manager.
4. Choose **Always on Top** from the Clip-Art Manager System menu. (A check mark will appear beside the menu item.)
5. Drag the EXPRESS window to resize it to its smallest size.



6. Choose **Only** from the Clip-Art Manager's Thumbnail menu. The Clip-Art Manager resizes to a narrow, vertical column.

The Clip-Art Manager is now ready for interactive use with other applications. Notice that the Clip-Art Manager's minimize and maximize button will "foldup" and unfold the window so that it is out of your work area but handy when needed.

To paste clip art in another application:

1. EXPRESS can copy bitmap, Windows Metafile, or Arts & Letters format images to the Windows clipboard. Click on Clipboard in the Clip-Art Manager's Options menu.
2. Check the appropriate box(es) in the Cut/Copy Formats box and click on OK.
3. Select a thumbnail image and choose copy from the Options menu in EXPRESS' Clip-Art Manager. The image is copied to the Windows clipboard.

Note: Do NOT double-click on the thumbnail image.

4. In your destination application, paste the image using the method prescribed by the application documentation. If your application supports OLE, you can double click on the image to open EXPRESS and edit it.

The Clip-Art Manager Dialog Box

Using the Numeric Bar

The Numeric Bar at the bottom of your screen gives information about the position of the cursor and about the measurements of a selected object.

The **x** and **y** buttons give the horizontal and vertical coordinates of the cursor. The **r** button indicates the degree of rotation of a selected object. The **h** and **v** buttons indicate respectively the horizontal and vertical slant of a selected object.

Clicking on a Numeric Bar button while an object is selected displays the Transform dialog box.

 **See Transform**

Vector Dialog Box

A vector drawing is defined as a series of straight lines. EXPRESS offers many ready-made vector patterns that can be used to give the interiors of objects different textures and effects. To display the Vector Dialog Box, click on the Vector option under Fill in the Styles menu. Scroll through the numbered list to select a vector pattern.

Virtually Limitless Number of Objects

You can add or freeform up to 65,000 objects in a single document, or until you run out of memory on your system, whichever comes first.

To determine the number of objects within a document select About Arts & Letters EXPRESS from the Help menu. At the bottom of the box, above the OK button, is a panel that reads "Total number of objects in use: 00" The number following the colon includes objects that are grouped and counts the group itself as one object.

Warp/Perspective Commands

A Warp is a two-dimensional distortion of an object in EXPRESS, applied through the Warp dialog box in the Effects menu or through the Warp tool in the Effects flyout in the toolbox. The Warp/Perspective dialog box includes shape, symmetry, orientation, compress/stretch, and option commands.

The [Shape commands](#) allow you to quickly apply a pre-defined warp or perspective shape to an object. Click on the shape icon desired or choose the shape name from the Shape submenu which appears when you click on Shape in the Options menu.

The [Symmetry commands](#) control how an effect is applied to parallel sides of an object. Click on the symmetry icon desired or choose the symmetry name from the Symmetry submenu which appears when you click on Symmetry in the Options menu.

The [Orientation commands](#) control the direction in which an effect is applied to an object. Click on the orientation icon desired or choose the orientation name from the Orientation submenu which appears when you click on Orientation in the Options menu.

The [Compress/Stretch commands](#) control the bias of a perspective effect toward the middle, ends, or sides of the object. With the one-point perspective or two-point perspective shape selected, click on the compress/stretch icon desired or choose the compress/stretch name from the Compress submenu which appears when you click on Compress in the Options menu. An "Auto Perspective" check box lets you automatically apply the mathematically and visually correct compress/stretch based on the Shape, Symmetry, and Orientation options chosen.

The [Option commands](#) allow you to set desired parameters for warping. Choose the options desired from the Options menu.

Warp/Perspective Compress/Stretch

Compress/Stretch commands are valid with the one point perspective and two point perspective shapes.



No Compress/Stretch

The no compress/stretch command applies no bias to the object.



Left Compress/Stretch

The left compress/stretch command biases the object toward the left side.



Right Compress/Stretch

The right compress/stretch command biases the object toward the right side.



Left/Right Compress/Stretch

The left/right compress/stretch command biases the object toward the left and right sides.



Center Compress/Stretch

The center compress/stretch command biases the object toward the center.

Warp/Perspective Options

The Warp/Perspective options are toggles that you can turn on or off as desired.

Allow Horizontal/Vertical Moves ([default](#): on). This command applies to the Freeform shape, and allows handles on the warp envelope to be moved both horizontally and vertically. Turning this command off will prevent accidental compressing or stretching of the warp object along the axis of the compress/stretch.

Maintain Lines (default: off). When an object is warped, lines in the object may be converted to curves to create the warp shape. To keep all line segments as lines, choose Maintain Lines.

Show Perspective Lines (default: on). When either the one point or two point perspective shape is selected, the Show Perspective Lines command allows you to display dashed perspective lines to the vanishing point(s). Point handles are displayed at the vanishing points, and can be [dragged](#) to adjust the perspective effect.

Auto Apply (default: on). This command toggles the automatic updating of warp adjustments on and off. When Auto Apply is on, selecting a warp command or dragging a handle on the warp envelope causes the new shape to be immediately calculated and displayed. When Auto Apply is off, the Apply or Done buttons must be selected to recalculate and display changes to a warp shape.

Warp/Perspective Orientation



Vertical Orientation

Choosing vertical orientation applies the warp effect vertically and places handles on the top and bottom of the warp envelope. These handles can be [dragged](#) vertically.



Horizontal Orientation

Choosing horizontal orientation applies the warp effect horizontally and places handles on the left and right of the warp envelope. These handles can be dragged horizontally.

Warp/Perspective Shapes

Click on a shape name below for a definition of the shape.



[One Point Perspective](#)



[Two Point Perspective](#)



[Arch](#)



[Slope](#)



[S-Slope](#)



[Wave](#)



[Roller Coaster](#)



[Bell](#)



[Ring](#)



[Freeform](#)

Warp/Perspective Symmetry

The symmetry commands let you adjust opposite points on a warp envelope in tandem.

No Symmetry

With no symmetry chosen, when you [drag](#) a point on a warp envelope, no other points move.



Parallel Symmetry

With parallel symmetry chosen, when you drag a point on a warp envelope, the opposite point moves in parallel. When you select a new warp shape, the effect is applied identically to parallel sides.

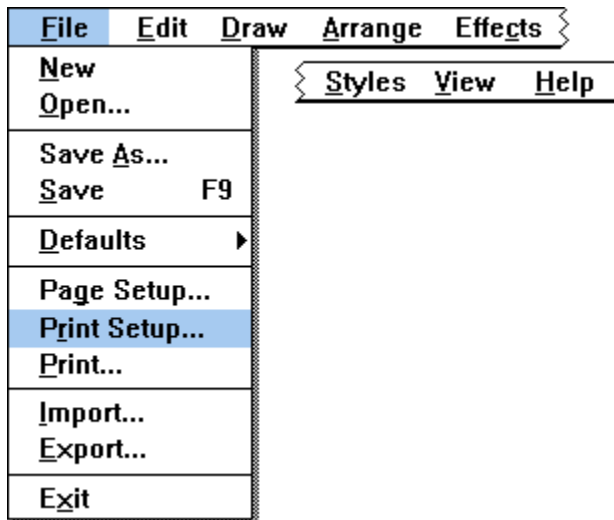


Mirrored Symmetry

With mirrored symmetry chosen, when you drag a point on a warp envelope, the opposite point moves in the opposite direction. When you select a new warp shape, the effect is applied in the opposite direction to parallel sides.

Menus

The Menu Bar, located below the Title Bar, contains the names of the various EXPRESS menus. The menus "drop-down" when you click on the names. Click on the representation of the Menu bar below to display the various drop-down menus.



Browsing EXPRESS Menus

Use the <<Page and Page>> buttons to browse alphabetically through the menus found in EXPRESS. When you are at the beginning or end of a browse group* the respective button will be disabled or turn gray. To choose another browse group, pull down the What's New menu and choose Help Browser. Another menu will appear displaying additional browse groups.

* A browse "group" is a collection of terms, commands, tools, etc. that are related according to function, definition, or content. For example, the browse group "Commands" allows you to browse all EXPRESS commands. You can access the browse groups when you choose Help Browser from the What's New menu.

Arrange Menu



The Arrange menu contains commands for precision drawing and editing. Click on any command to display specific information about that command.

menu

Draw Menu



The Draw menu contains commands for placing art forms, clip art, and text in the drawing area and for drawing lines. Click on any command to display specific information about that command.

menu

Edit Menu



The Edit menu contains commands for selecting and deleting objects, for undoing and undeleting, and for transferring objects to and from the clipboard. Click on any command to display specific information about that command.

menu

Effects Menu



The Effects menu contains commands for sizing, positioning, and duplicating objects. Click on any command to display specific information about that command.

menu

File Menu



The File menu contains commands for opening, saving, and printing documents. Click on any command to display specific information about that command.

menu

Help Menu



The Help menu contains commands for accessing the on-screen help system, and for displaying an EXPRESS information screen. Click on any command to display specific information about that command.

menu

Styles Menu



The Styles menu contains commands for changing the color, lines, fill, and type style of objects. Click on any command to display specific information about that command.

menu

View Menu



The View menu contains commands for changing the way in which a document is displayed and for controlling the appearance of the EXPRESS interface. Click on any command to display specific information about that command.

menu

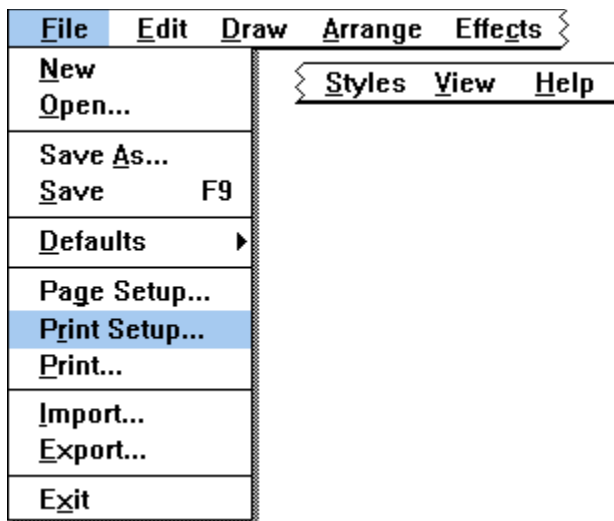
Menu commands: (1) perform a function, (2) provide a tool, (3) display a dialog box (commands followed by an ellipsis [...]), or (4) display a sub-menu of related commands (commands followed by a pointer [>]).

menu

Menus are lists of commands. Menu names appear in a row beneath the Arts & Letters EXPRESS title bar. To select a command from a menu list, click the left mouse button on the command name.

menu

Click below to display a menu.

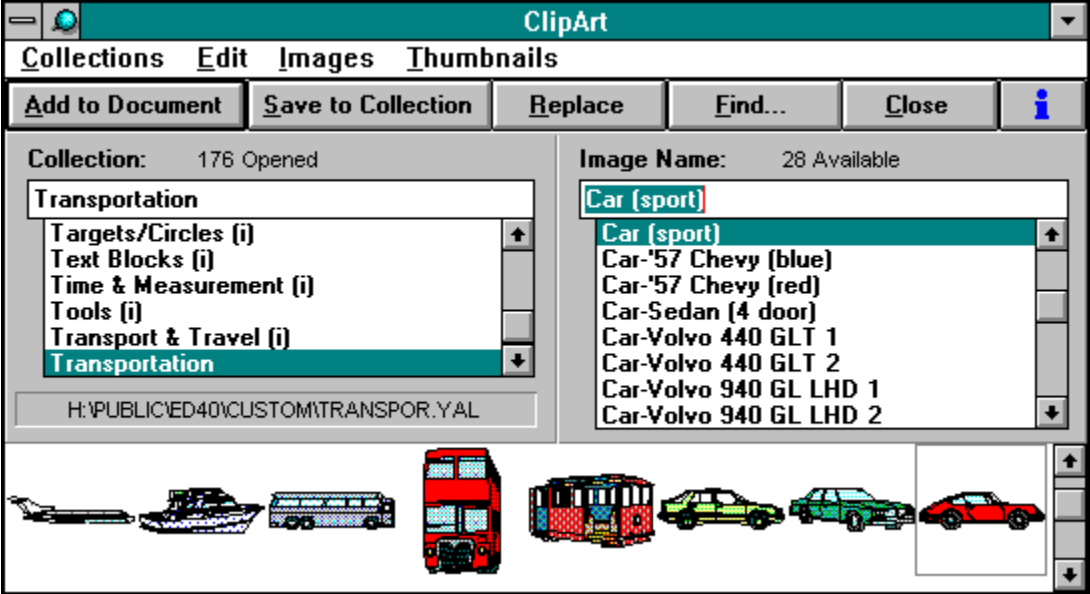


menu

The numeric bar gives information about the position of the cursor and about the measurements of a selected object. The x and y buttons always give the horizontal and vertical coordinates for the cursor. The r button indicates the degree of rotation for a selected object. The h and v buttons indicate respectively the horizontal and vertical slant for a selected object. Clicking on numeric button while an object is selected displays the Transform dialog box in various states.

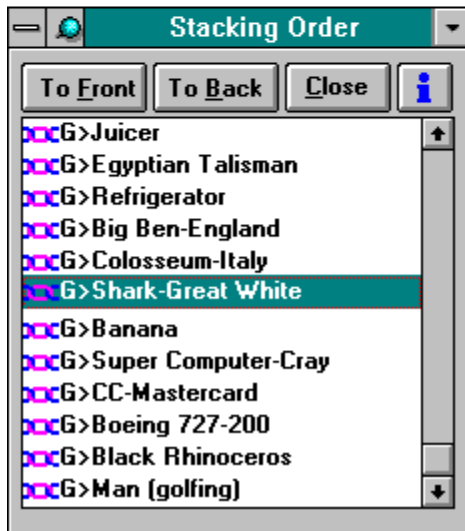
menu

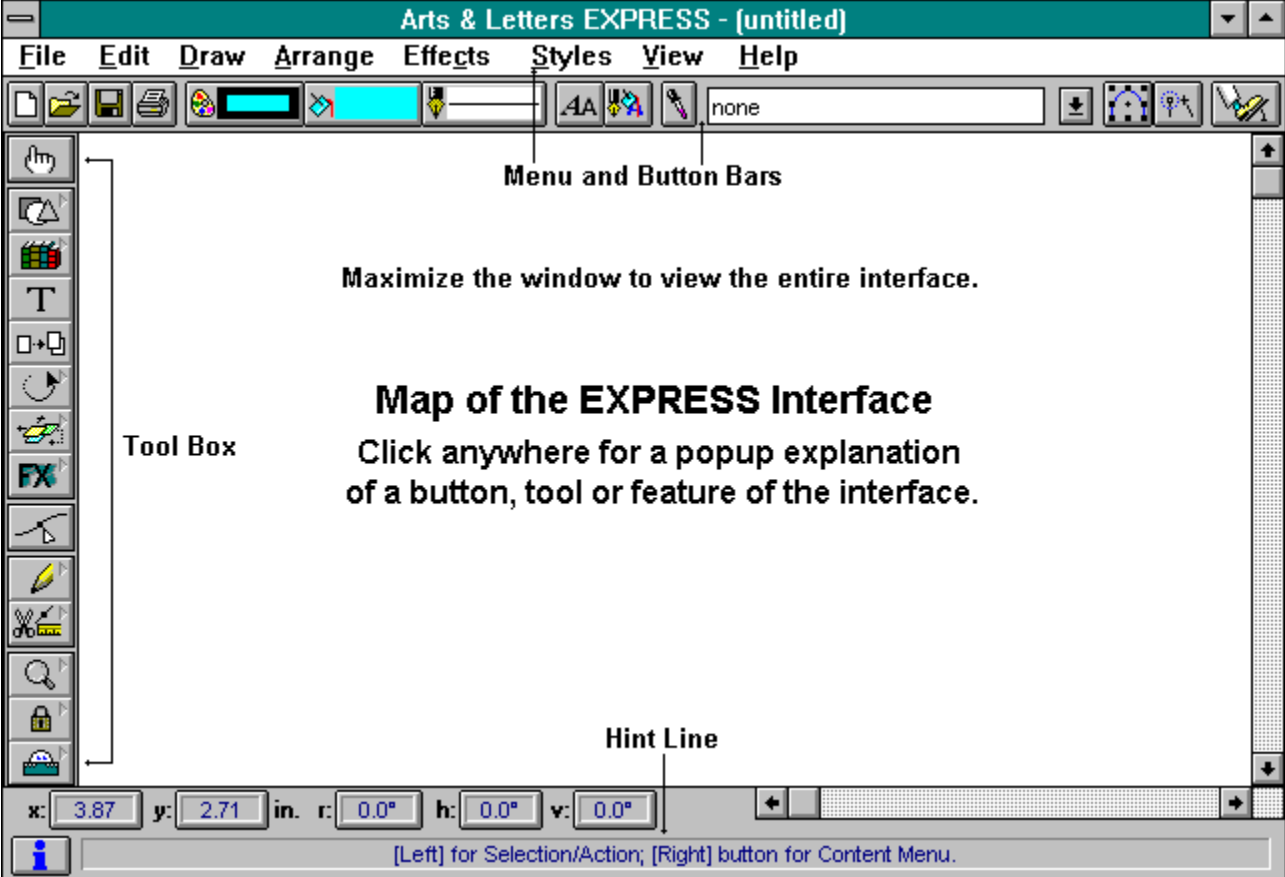







Before move ↑ After move ↓





Extrude

Done Cancel 

Specify by

Trackball

Perspective

Show Vanishing Point

x: y: cm.

Depth: cm.

Side Color

Blue

Preview

Wireframe

Solid Box

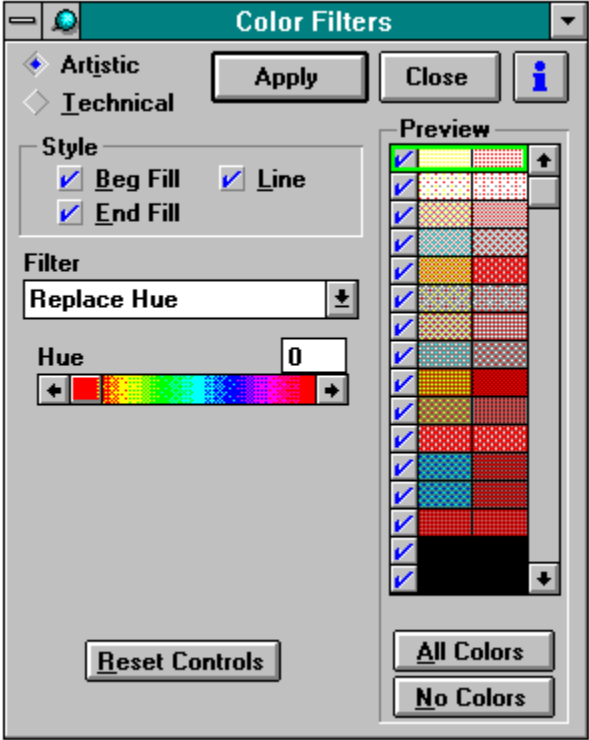
Enter/Edit Text

Empty text input area with scrollbars and arrow keys.

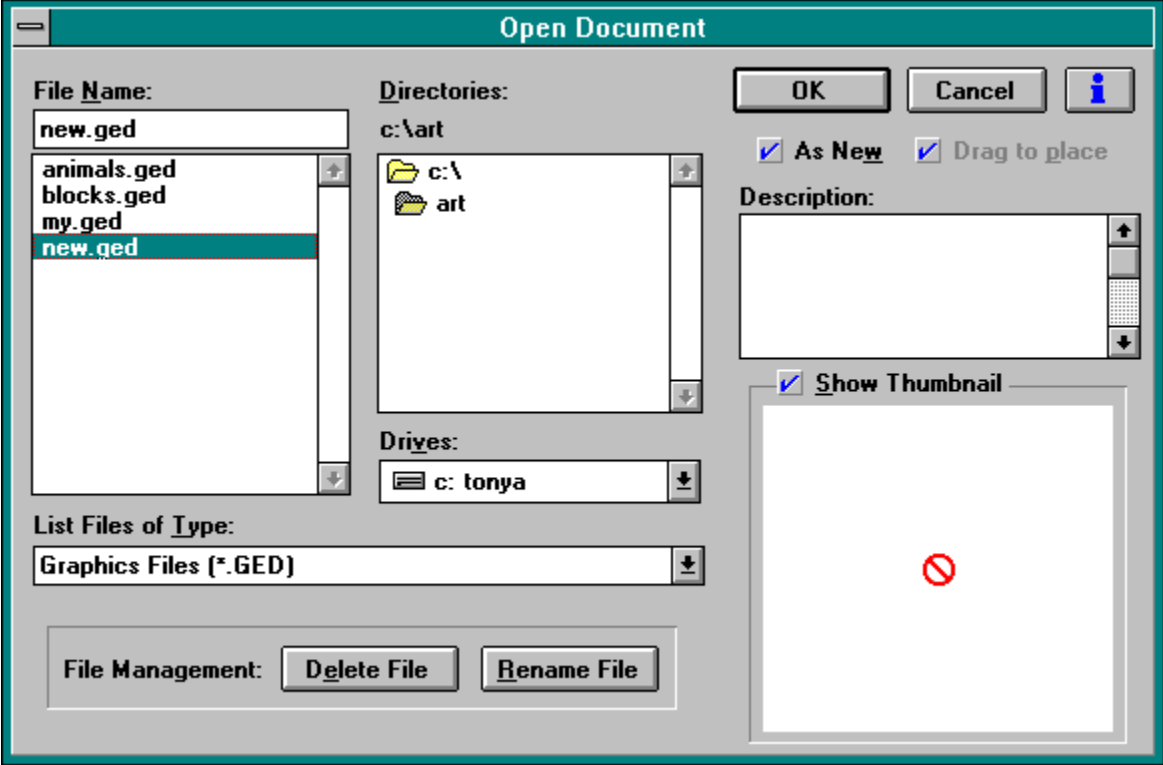
Add
Replace
Undo
Cancel
i

Case Conversion

None **All Upper** **All Lower**

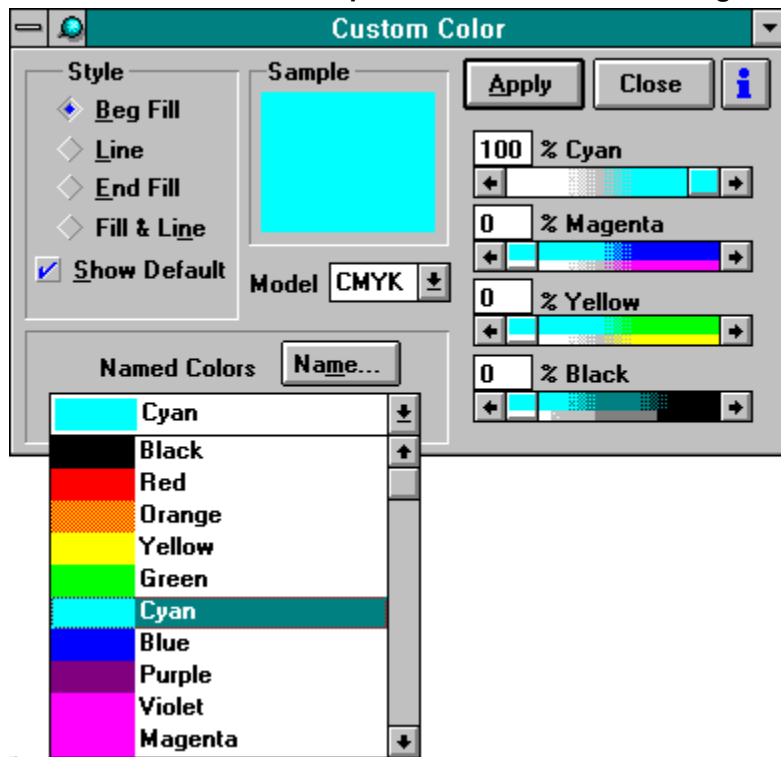


	Original	Preview
Hue	60	0
% W	75	75
% B	0	0
Name	000-000-025-001	
<input type="button" value="Close"/>		

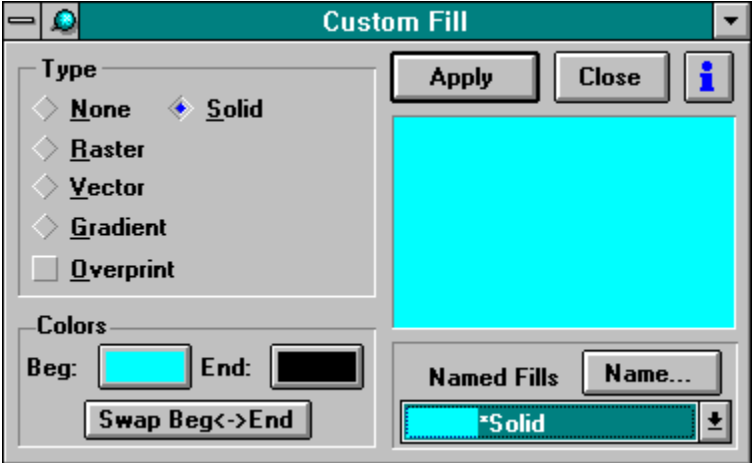


Displays the fixed-disk drives available to your computer.

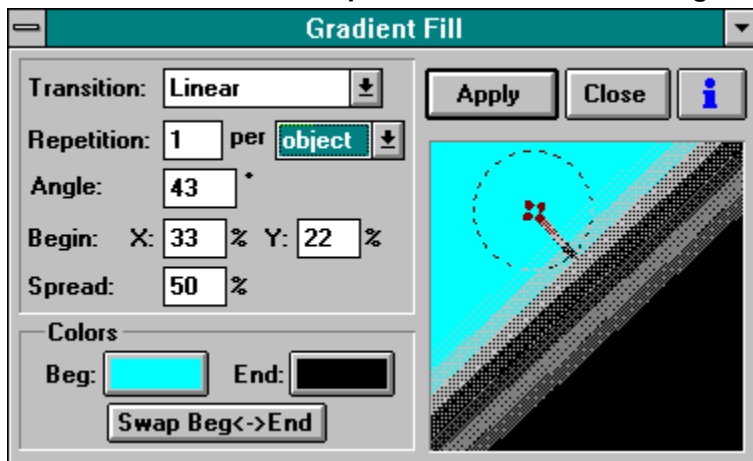
Maximize the window to explore the Custom Color dialog box.



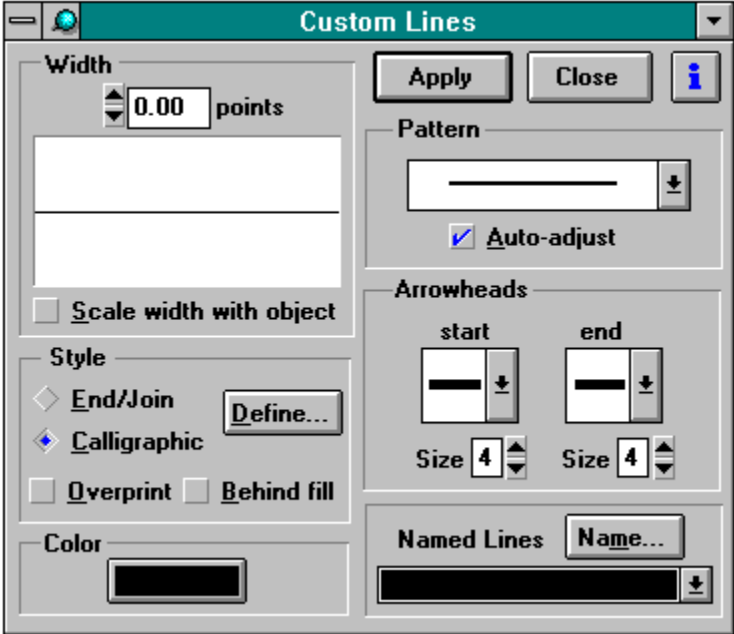
Maximize the window to explore the Custom Fill dialog box.



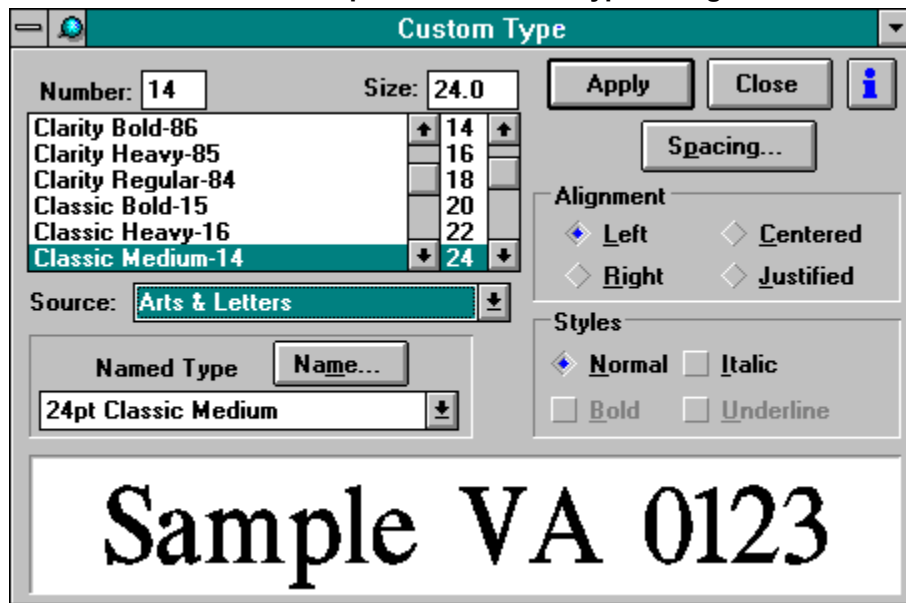
Maximize the window to explore the Gradient Fill dialog box.



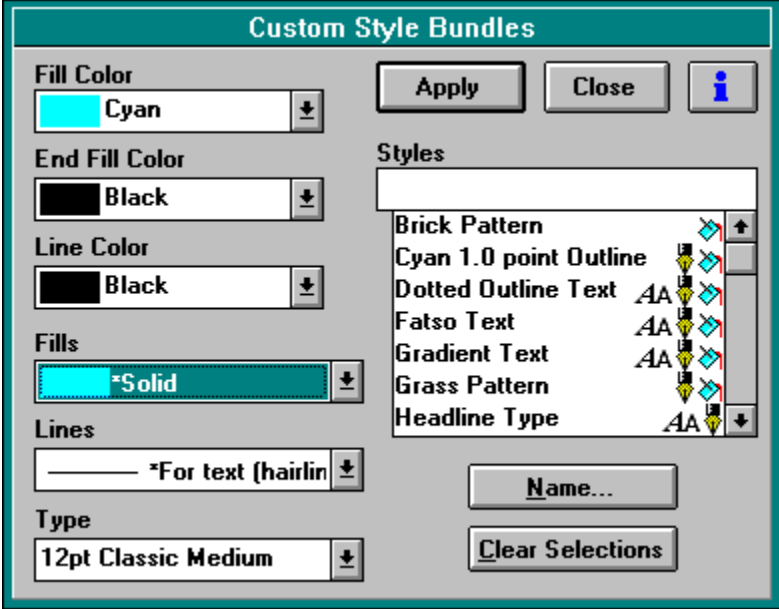
Maximize the window to explore the Custom Lines dialog box.



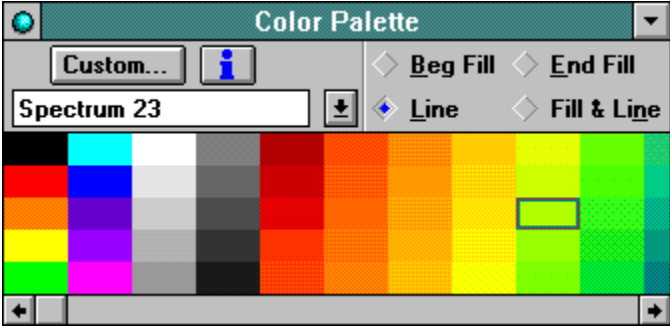
Maximize the window to explore the Custom Type dialog box.



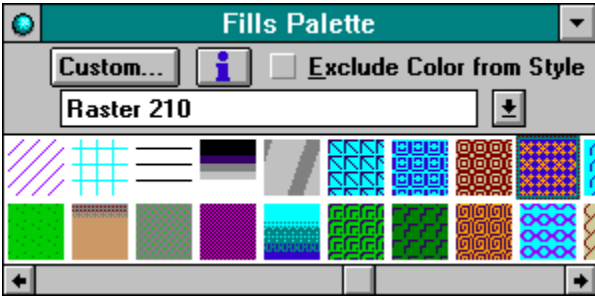
Maximize the window to explore the Custom Style Bundles dialog box.



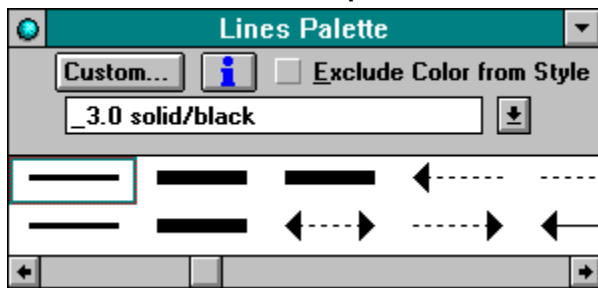
Maximize the window to explore the Color Palette dialog box.



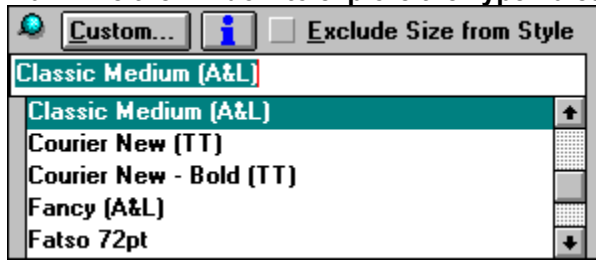
Maximize the window to explore the Fills Palette dialog box.



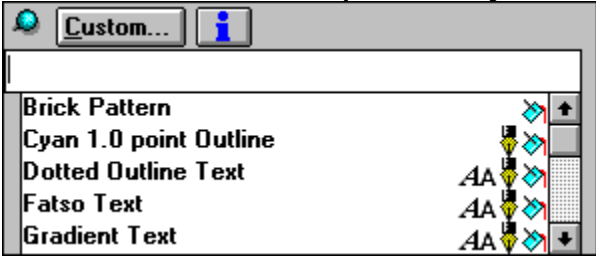
Maximize the window to explore the Lines Palette dialog box.



Maximize the window to explore the Type Palette dialog box.



Maximize the window to explore the Styles Palette dialog box.





Custom...

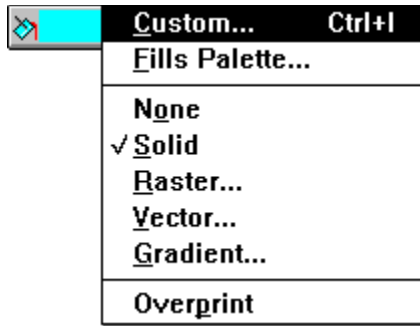
C**o**lor **P**alette...

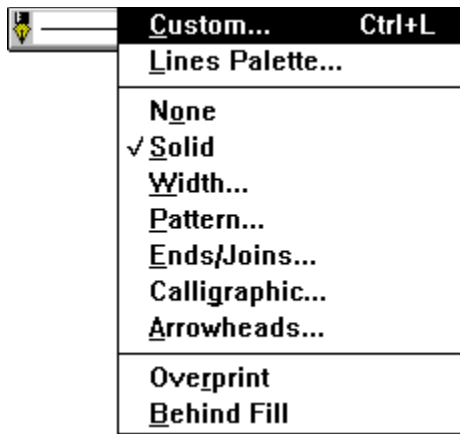
C**o**lor **F**ilters...

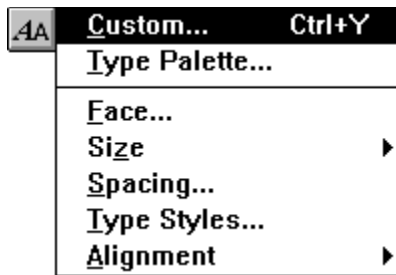
New **P**alette

Open...

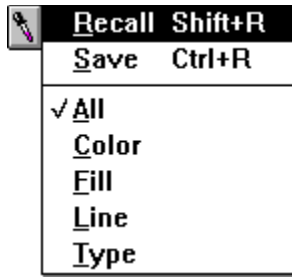
S**a**ve **A**s...



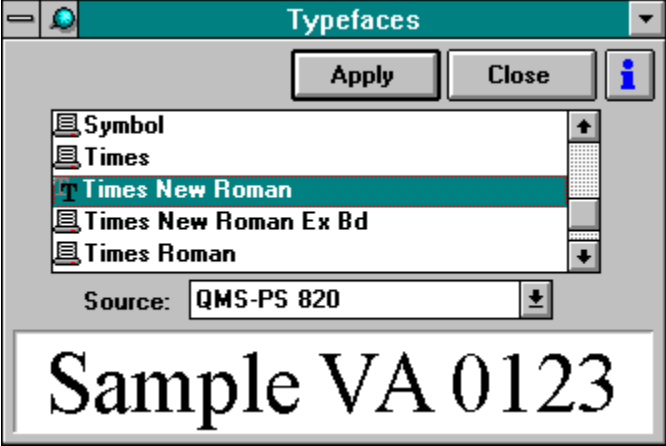




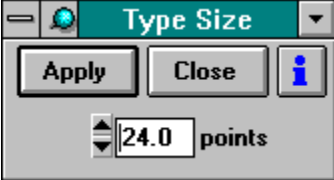


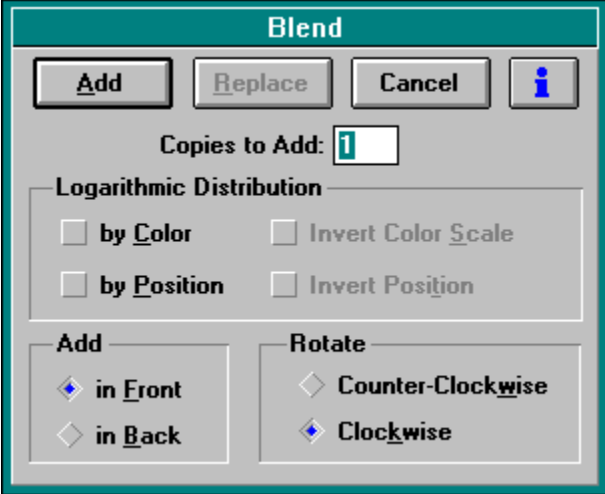













Bind to Shape



Placement

- Top Msg
- Center ~~Msg~~
- Baseline Msg
- Bottom Msg

Orientation

- Upright ABC
- Rotate ABC

Show shape

Reverse Direction

Warp/Perspective

Options

Apply **Done** **Cancel** **i**

Shape

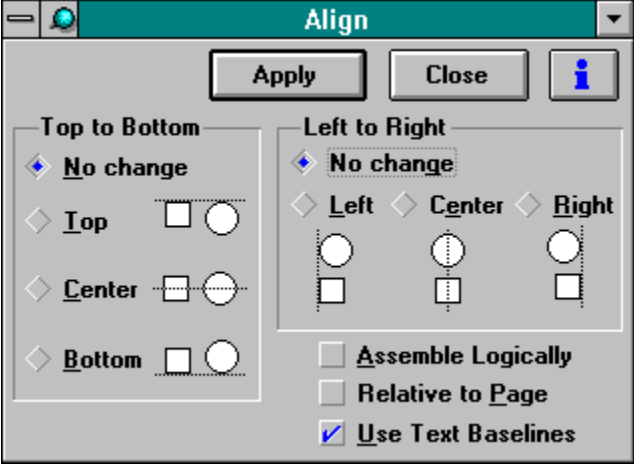
Symmetry **Orientation**

--	--	--	--	--


Compress/Stretch

--	--	--	--	--

Auto Perspective



Transform

Duplicates 

Values

Width: in.

Height: in.

Proportional

Operation

Size

Position

Rotate


Slant

Use values as:

Add to/Subtract from existing value

Absolute measurement

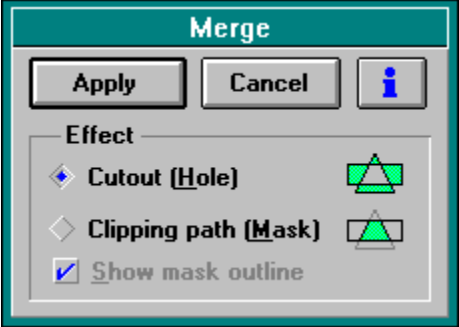
Anchor Point



Specify

X: in.

Y: in.



Blend Dialog box BEGIN

Enter the number of copies desired in the blend in the Copies to Add box.

If desired, choose to blend the color or position of the object using a logarithmic or reverse-logarithmic scale. A logarithmic scale bunches the transitions of the blend at one end.

Choose to add the transitional copies of the object in front of or behind the original.

If you want to rotate the objects in the blend, choose which direction you want them rotated -- clockwise or counterclockwise.

If you wish to modify the blend while preserving it as a blend, alter the object as desired, and click on Replace.

Click on Add to apply the blend to a selected object.

Blend Dialog box END

Bind to Shape Dialog box BEGIN

The Placement options let you specify where the text is to be placed on the shape. Choose Top to bind the top of the text to the shape, Center to bind the center of the text to the shape, Baseline to bind the baseline of the text to the shape, or Bottom to bind the bottom of the text to the shape.

Click on the Apply button when you are ready to bind your text to a shape, or click on Cancel to exit the Bind to Shape dialog box.

The Orientation option allows you to specify the position of the text along the shape. It can either be bound along the shape in an upright position or rotated along the edge of the shape.

The Show Shape Option allows you to choose whether or not to display the shape to which the text is bound.

Click on Reverse Direction to change the drawing direction.

Bind to Shape Dialog box END

Warp Dialog box BEGIN

Click on the appropriate **Shape** button to choose a Warp shape. Warp shapes can be modified using the Symmetry, Orientation, and Compress/Stretch tools, and by manipulating the point handles on the warp object.

The **Symmetry** settings let you make parallel and mirrored adjustments to the Warp bounding box. Symmetry can be chosen by clicking on the appropriate icon or by selecting the Symmetry command in the Shapes menu.

No Symmetry lets you move points individually on the Warp envelope.

Parallel symmetry lets you move opposite points in parallel.

Mirrored symmetry lets you move opposite points in opposite directions.

The Orientation settings determine the direction you can warp an object. Orientation can be chosen by clicking on the appropriate button or by selecting the Orientation command in the Warp shapes menu in the Warp dialog box.

Vertical orientation places handles on the top and bottom of the Warp bounding box. You can move these handles vertically.

Horizontal orientation places handles on the left and right of the Warp envelope. You can move these handles horizontally.

The Compress/Stretch settings let you compress or stretch an object along a left/right or top/bottom axis to achieve different perspective effects, such as making objects appear to recede in the distance. Compress/Stretch can be chosen by clicking on the appropriate icon or by selecting Compress from the Options menu.

Auto Perspective must be turned off to select a Compress/Stretch setting. When you select a Compress/Stretch of Left, Right, Left/Right, or Center, a scroll bar lets you adjust the amount of compression or stretch you want to apply to the object.

Auto Perspective calculates the mathematically and visually correct compress/stretch based on the Warp shape and symmetry chosen. Auto Perspective is available only when using the one-point and two-point perspective shapes.

The Options menu contains warp options. When an option is active, a check mark appears next to it in the menu; selecting the option a second time removes the check mark and toggles it off.

Warp Dialog box END

Align Dialog box BEGIN

Top aligns objects in relation to the top-most object.

Center aligns objects from top to bottom in relation to their centers.

Bottom aligns objects in relation to the bottom-most object.

Left aligns objects in relation to the left-most object.

Center aligns objects from left to right in relation to their centers.

Right aligns objects in relation to the right-most object.

Assemble logically reassembles a composite clip-art object that has been temporarily broken apart.

Relative to page aligns objects in relation to the page.

Use text baselines aligns text objects in relation to their baselines. It has no effect on other objects.

Align Dialog box END

Transform Dialog box BEGIN

Choose Add to/Subtract from existing value to transform the object in relation to its current state or Absolute to transform the object in absolute units.

Anchor Point allows you to specify an "anchor point" for the transformation. You can choose one of the 9 preset points or enter your own in X and Y coordinates. (You can locate an X and Y position by moving the cursor in the document work area. The X and Y position of the cursor is displayed in the Numeric bar.)

The **Duplicates** option creates a transformed duplicate of the selected object, while leaving the original object unaffected.

The **Operation** box displays the type of transformation to perform on a selected object. You may transform a selected object by altering its size, position, rotation, or slant.

The **Values** option allows you to enter values to change the size, position, rotation, or slant of a selected object.

The **Proportional** option allows you to transform an object either proportionally or non-proportionally.

Transform Dialog box END

Enter/Edit Text Dialog box BEGIN

Type your text in the **Text Box**.

If you type all the way to the right boundary, the type scrolls to the left so you can continue the line. Note that line breaks must be manually inserted in the displayed text block. The text box can contain up to 5,000 characters. When you reach the bottom of the text box, the text scrolls upward one line each time you begin a new line.

Click on the **Undo** button to erase the new text you have typed.

If you want to convert the text you typed to all upper or lower case, choose the **All Upper** or **All Lower** option button.

Click on the **Add** button to add the text to the screen.
The Enter/Edit Text dialog box will disappear, and the Pointer changes to an Hourglass for a moment during processing. Then the Hourglass changes to the Add Object cursor.
Position the Add Object cursor where you want the text to appear.

Click on **Replace** to replace an existing text object with another text object.

Enter/Edit Text Dialog box END

Merge Dialog box BEGIN

When two overlapping objects are selected, choosing Cutout (Hole) will create a hole in the bottom object in the shape of the top object's overlap.

When two or more overlapping objects are selected, choosing Clipping path (Mask) will cause the top object to act as a "cookie cutter", clipping all the objects beneath it.

Merge Dialog box END

Type Size Dialog box BEGIN

Click on an arrow to change the point size of a text object or enter the number manually.

The Apply button changes the point size of the currently selected text object.
The Close button cancels the Type Size dialog box.
The **i** button accesses help for this dialog box.

Type Size Dialog box END

Typeface Dialog box BEGIN

The Apply button changes the typeface of the currently selected text object.
The Close button cancels the Typeface dialog box.
The **i** button accesses help for this dialog box.

The scrolling typeface list box displays the typefaces available for your use. If you have a printer selected as the source for your typefaces, each item in this list will be preceded by an icon which indicates whether the font is a TrueType font or a printer font.

The source list box displays the sources from which the typefaces are available. The source fonts are Arts & Letters or the currently selected printer.

The sample box displays the currently selected typeface.

Typeface Dialog Box END

Type Spacing Dialog Box BEGIN

The **Apply** button changes the type spacing of the currently selected text object.
The **Close** button cancels the Type Spacing dialog box.
The **i** button accesses help for this dialog box.

The Auto option for Letter spacing allows EXPRESS to calculate the space between the letters in words and phrases. If used with Proportional, EXPRESS will assign the spacing values based on the actual size of the letters.

The Proportional option for Letter spacing can be toggled on or off. When on, EXPRESS allows you to adjust the spacing between the letters based on the actual size of the letters.

When off, the spacing is determined by the invisible cell which surrounds each letter. The size of each cell is equal to the dimensions of a capital M.

The Auto option for Word spacing allows EXPRESS to determine the space between each word in a phrase.

The Auto option for Leading spacing allows EXPRESS to determine the space between each line of text in a text object.

The Kerning option for lets you determine the space between kerning pairs in a text object.

Type Spacing Dialog Box END

Type Palette BEGIN

The Custom button opens the Custom Type Dialog Box in which you can choose typeface, type size, type spacing, text alignment, and type style.

The **i** button displays help for the Type Palette Dialog Box.

The Exclude Size from Style check box allows you to select different styles of type without changing size.

The scrolling list of fonts allows you to select a typeface for the currently selected text object.

Type Palette END

Type Style Dialog Box BEGIN

The **Apply** button changes the type style of the currently selected text object.
The **Close** button cancels the Type Style dialog box.
The **i** button accesses help for this dialog box.

Select Normal, **Bold**, *Italic*, or Underline from the type style options.

Type Style Dialog Box END

Styles Palette BEGIN

The Custom button opens the Custom Style Bundles Dialog Box in which you can create your own combinations of color, fill, line, and type styles.

The **i** button displays help for the Styles Palette Dialog Box.

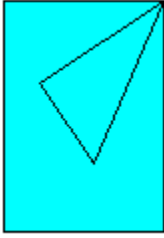
The scrolling list of named styles allows you to select a style combination for the currently selected object.

Styles Palette END

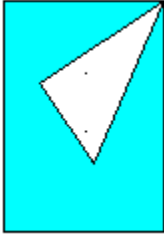
Shape Info Dialog Box BEGIN

The Shape Information box displays the statistical data about the EXPRESS image selected on the work area.

When Winding Number is selected, EXPRESS uses the direction in which an object is drawn to determine whether to fill an area. Each line segment in a polygon is drawn in either a clockwise or counterclockwise direction.



When Even/Odd is selected, EXPRESS fills the area between odd-numbered and even-numbered polygon sides. That is, EXPRESS fills the area between the first and second side, between the third and fourth side and so on.



Shape Info Dialog Box END

Fills Palette Dialog Box BEGIN

The pushpin keeps the Fill Palette dialog box open for handy access while you are choosing fills.

The Custom button displays the custom fill content menu when you press and hold the mouse button. When you release the mouse button the Custom Fills dialog box displays.

The **i** button displays help for the Fill Palette dialog.

The Exclude Color from Style check box allows you to select different types of fills and gradients without changing color.

This pull-down, scrolling menu allows you to view the fill styles and choose one by either appearance or name.

The scrolling list allows you to select a fill style for the currently selected object.

Fills Palette Dialog Box END

Clip Art Manager Dialog Box Begin

The control menu allows you to select typical Windows commands and keep the Clip Art Manger always on top.

Always on Top keeps the Clip Art Manager handy for copying clip art to the clipboard and pasting it into your page layout program.



Using EXPRESS Interactively with Other Applications

The push pin keeps the Clip-Art Manager on top so that you can quickly access the collections. This feature is especially useful when used with the Only command in the Thumbnails menu in the Clip-Art Manager.

The minimize button or foldup button resizes the Clip-Art Manager window to its smallest size. Use the pushpin to keep the Clip-Art Manager on the drawing area.

The Collections menu displays the New, Open, Reload Collections, Change Info, Close Current Collection, and Close All Collections commands.

New: Allows you to name a new YAL file to store your work in. You can also document the contents of the file.

Open: Displays the Open Collection dialog box which allows you to select and open additional clip-art collections.

Reload Collections: Automatically reloads all collections from the location specified in your ALLETTER.INI. This feature comes in handy if you have closed all the current collections and need to reopen them or if you are loading collections which span multiple CDs.

Change Info: Displays the Change Collection Info dialog box.

Close Current Collection: Closes the current clip-art collection (*.YAL file).

Close All Collections: Closes all clip-art collections currently open in the clip-art manager. Those collections are listed in the Collections box.

The Edit menu displays the Copy command. This command copies an objects to the Windows clipboard.
Note: Express can copy up to three file types to the clipboard: Arts & Letters, Windows Metafile, and Bitmap.

The Images menu displays the Change Name/Keywords... and the Delete commands. The Change Name/Keywords command displays the Change Image Info dialog box. The Delete command allows you to delete images from a clip-art collection.

The Thumbnail menu contains the Hide, Only, and Update commands.

Hide: Closes the thumbnails window.

Only: Reduces the Clip-Art Manager to a small, vertical window from which you can drag and drop clip art.

Update: Displays a submenu so that you can choose which thumbnails to update and the color depth of the thumbnails.

The Add to Document button allows you to place the currently selected clip-art image to the work area. After you click on Add to Document, move the cursor to the work area. Then click the add object cursor.

The Save to Collection button copies and stores the object or group of objects to the Clip-Art Manager's current collection. You cannot save more than one object or group at one time.

The Replace button allows you to replace the currently selected object on the work area with a new image from a clip-art collection. Select an image on the drawing area, select an image from the Clip-Art Manager, and click on Replace.

The Find button displays the Find Images dialog box. Use this function to search EXPRESS' clip-art collections with keywords.

The Close button removes the Clip-Art Manager. It has the same effect as using the pushpin.

The Help button or **i** button accesses the help topic for the Clip-Art Manager.

The Collection list shows all the currently open clip-art collections.

The Image Name list shows the images by name contained in the current clip-art collection.

The path window displays the location of the currently selected clip-art collection (a YAL file).

This is the thumbnails list window which displays the currently selected clip-art collection.

A square surrounding a thumbnail indicates the currently selected image.

The scroll bar allows you to view the clip-art collection.

Clip Art Manger Dialog Box END

Custom Line Dialog Box BEGIN

The Custom button opens the Custom Line dialog box in which you can customize line width, arrowheads, and line patterns.

The Exclude Color from Style check box allows you to choose a different line style from the palette without changing the color.

The scrolling line style list box allows you to choose a line style by its appearance.

The minimize button allows you "roll up" and put the dialog box out of the way while working.

The pushpin keeps the line palette on the drawing area.

The line name list box allows you to choose a line style by name.

The **i** button opens EXPRESS on-line help for the line palette dialog box.

Custom Line Dialog Box END

Custom Color Dialog Box BEGIN

The Custom button opens the Custom Color dialog box in which you can mix colors, use color filters, and save new color palettes.

The **i** button opens EXPRESS on-line help for the color dialog box.

For all the color models in EXPRESS the Slider Button moves along a spectrum that is split horizontally. The bottom half of each spectrum is constant, showing the range of subtraction or addition of the color on that bar. The top half varies, showing the effect of all the other colors in the model upon that particular color element.

The arrow buttons at either side of the color bar allow more precise subtractions or additions of color.

The Color Palette List Box shows the names that have been assigned to each color. When you select a name, the palette shifts to the corresponding color in the palette and highlights it with a red box. The Color Palette list box is an alternative to changing the color of lines and/or fills with the color cells.

Beginning Fill is the fill of the first color of a gradient or a raster pattern, and is the only color for all other fill patterns. The color you choose from the Named Colors palette below, or which you mix at right, will be applied when this box is checked.

Lines can have a color different from the object's interior. The color you choose from the Named Colors palette below, or which you mix at right, will be applied to the line of your object when this box is checked.

End Fill specifies the second color of a gradient or a raster pattern. (It has no significance for other objects.) The color you choose from the Named Colors palette below, or which you mix at right, will become the second color of your gradient or raster when this box is checked.

Fill & Line lets you change the colors of an object's fills and lines to the same color. The color you choose from the color palette, or which you mix at right, applies to line and fill when this box is checked.

Color Cells allow you to select a color and see the change instantly. Simply select the object and single click on a color cell to select it.

The scroll bar lets you quickly scroll through the spectrum of colors in the palette or scroll column by column by clicking on the left or right arrow buttons.

The Sample patch shows your Named Colors choice or the result of your mixing colors. If you change your mind before leaving the dialog box, you can return to the object's original colors by checking (or re-checking) the Show Current Object option box.


Custom Color Dialog Box END

An object is made transparent by giving it no color. Do this by checking the None check box.

Solid is the default fill for EXPRESS objects. The chosen color fills every part of the object's interior.

A raster is an image defined as a collection of pixels (dots). EXPRESS offers many ready-made raster patterns that can be used to give the interiors of objects different textures and effects. Scroll through the numbered list that appears when the raster option is chosen.

A vector drawing is defined as a series of straight lines. EXPRESS offers many ready-made vector patterns that can be used to give the interiors of objects different textures and effects. Scroll through the numbered list that appears when the vector option is chosen.

Gradients, or transitions from one color to another, can be defined by choosing this option.
 **The Gradient Fill dialog box.**

The overprinting of fills is most often used when printing black text or line art over a color. When other colors overprint they may combine to produce a new, unexpected, color. Furthermore, this new color cannot be seen on your monitor, since colored objects conceal objects stacked beneath them. The effect is not seen until the artwork is printed.

For example, a transparent effect can be achieved by printing a milky or translucent color over a bolder color. In silk screen printing -- most commonly, in the printing of T-shirts -- the trapping correction provided by overprinted lines may be insufficient because the registration, or alignment, of colors is much less exact than when printing to paper. Overprinting their fills will assure that no white space appears between the adjacent colors.

Begin specifies the first color of a gradient or a raster fill. Clicking on the button displays a ready-made palette of colors and a Custom button in case you want to mix your own.

End specifies the second color of a gradient or a raster fill. Clicking on the button displays a ready-made palette of colors and a Custom button in case you want to mix your own.

Swap changes the places of the first and end color for a gradient or raster fill.

This rectangle shows a sample of the fill and its colors before application to the object.

Click on the down arrow to display a ready-made list of fills. Press the Name button if you have mixed a unique fill/color combination and want to save it. Once named, it remains in the list for the current file if the file is saved. To enter it in the list for other EXPRESS sessions, save the file as a [DEF file](#).

When this option box is checked the line thickness varies in proportion to the object as the object is resized.

Click this option box and then **Define** to modify the appearance of line endings or intersections.

Click this option box and press Define to draw a line or curve with calligraphic effects.

The overprinting of fills is most often used when printing black text or line art over a color. When other colors overprint they may combine to produce a new, unexpected, color. Furthermore, this new color cannot be seen on your monitor, since colored objects conceal objects stacked beneath them. The effect is not seen until the artwork is printed.

For example, a transparent effect can be achieved by printing a milky or translucent color over a bolder color. In silk screen printing -- most commonly, in the printing of T-shirts -- the trapping correction provided by overprinted lines may be insufficient because the registration, or alignment, of colors is much less exact than when printing to paper. Overprinting their fills will assure that no white space appears between the adjacent colors.

The Define button defines either End/Joins or the Calligraphic pen, whichever is selected.

Normally a line drawn in EXPRESS straddles the bounding box of the object that it defines. However, when Behind fill is checked, the fill covers the inner half of the line, halving its thickness.

Clicking on the Color button displays a ready-made palette of colors to apply to the line and a Custom button in case you want to mix your own.

When Auto-adjust is not checked, the chosen line pattern is drawn exactly as specified. When this option box is checked, the pattern is adjusted for the length and shape of the line so as to help avoid gaps and breaks where the line forms sharp angles.

Various end arrowheads are provided for the start and finish of a line segment. The size of the end figures can be increased or decreased by the scroll arrows next to the Size window below.

Click on the down arrow to display a ready-made list of named lines. Press the Name button if you have made a unique line and want to save it. Once named, it remains in the list for the current file if the file is saved. To enter it in the list for other EXPRESS sessions, save the file as a [DEF file](#).

An approximation of the changed line width is displayed in this field. It does not display line pattern or the effect of turning off all lines.

End Fill specifies the second color of a gradient or a raster pattern in a selected object. (It has no significance for other objects.) The color must have been previously named to be chosen in the Custom Style Bundles dialog box. Once named, it is available to Fill Color, Line Color, and End Fill Color.

Lines can have a color different from the objects they define. Press the down button to see a ready-made palette. The line color must have been previously named to be chosen in the Custom Style Bundles dialog box. Once named, it is available to Fill Color, Line Color, and End Fill Color for the current EXPRESS session. To enter it in the list for other EXPRESS sessions, save the file as a [DEF file](#).

Scroll through the list of ready-made styles, click on the desired name, and apply it. (If you don't like it, press Ctrl+Z to remove it.)

If you want to make a unique style bundle, you can start from an existing named bundle or erase them all by pressing Clear Selections. Press the Name button. Once named, it enters the list for the current file. To enter it in the list for other EXPRESS sessions, save the file as a [DEF file](#).

Clicking on the Help button brings you directly to a relevant topic.

Click on Close to exit the current dialog box.

Click on Cancel to exit the current dialog box.

Clicking here offers you options for specifying the fill style or pattern, if any.

Grid increments are in fractions or multiples of the chosen unit.

When the grid is checked on, it can be made to show over all objects or behind them.

When page borders are checked on, the imaginary lines dividing the separate pages of your document can be made to draw over all objects or behind them.

There are four transition effects for gradients: linear, radial, linear wave, and radial wave. Linear transitions stretch across the whole width of a gradient object in a straight line. Radial transitions draw from a single point in concentric circles. Wave transitions bunch the colors at each end of the transition, whether linear or radial.

The gradient can be repeated over the whole object or per current measuring unit. Enter a value in the repetition field and choose per object or per inch.

"Angle" is the tilt of the straight line stretching across the width of the object for linear transitions only. This value can be typed into the window or shown as a result of moving the gradient adjustment cross (in the large square at right) with the mouse.

"X" and "Y" show the coordinates of the center of the gradient adjustment cross (in the large square at right), and can be typed in or shown as a result of moving the cross with the mouse.

"Spread" indicates how deep the first color will go before becoming the transition to the second color. At 100%, the gradient blends from the first color to the second, along an imaginary line from the center of the gradient adjustment across to the farthest point of the object. At 50%, the transition is complete halfway along this imaginary line.

The beginning and ending colors of the gradient are selected here. Their places can be switched with the "swap" button.

This sample patch shows the effect of entering values in the windows of this dialog box, and of manipulating the gradient adjustment cross that appears in this square. When you click on the Apply button, these effects are applied to the selected object(s).

The **Apply** button gives the specified gradient attribute to the selected object. Once pressed, the Custom Fill dialog box remains. (You must then click on Apply to give the selection the gradient.)

Close cancels the gradient fill dialog box and brings you back to the Custom Fill dialog box.


i Opens the help topic for this dialog box.

This window shows the list of fonts available for the Source below -- in this case Arts & Letters, which offers over 1,000 scalable typefaces. If you have a printer selected as the source for your typefaces, each item in this list will be preceded by an icon which indicates whether the font is a TrueType font or a printer font.

The source for the fonts in the window above can be Arts & Letters (as in this example) or the printer fonts available to a printer installed under Windows.

The name of a font can be given by its source, or given a special name that identifies the typeface and a point size.

After using the Custom Type dialog box to give a name to your chosen combination of typeface, size, style, spacing, and alignment, that name will appear in the drop-down list here. You can then choose it, if desired, to be a part of the Custom Style Bundle that you are creating.

 **Custom Type dialog box**

File Name: allows you to enter the name of the file to be opened. The rules for DOS file naming apply here. Use no more than 8 characters.

Drives: allows you to specify the current drive (hard drive, floppy drive, etc.). Use the scrolling list to choose the desired drive.

Directories allows you to choose the current directory. Double click to open or close a folder. Single click to select.

OK opens the file you entered in the File Name box.
Cancel closes the Open dialog box without opening any files
i Opens the help topic for this dialog box.

As New opens the document in EXPRESS. When toggled (checked) on, it will allow Open Document to treat a newly opened document as a complete, separate file. With As New toggled off, any new file which is opened will be added, or merged with the previous document.

Drag to place works when Open As New is turned off. While in this condition, any new file which is opened will be added to, or merged with the previous file and a Drag to Place icon will appear in the drawing area, allowing you to size and place the image as desired. With both Drag to Place and As New turned off, all new files will stack on top of the previous files at the size in which they were saved. This is useful for checking registration of various files.

Description does not allow editing in the Open dialog box. Choose Save or Save As to change the Description.

Show Thumbnails allows you to preview a GED file prior to opening it. Since a representation of the GED is saved with the file in bitmap form, the thumbnail will render quickly; however, the GED file size is increased slightly. You cannot open files other than GED in this dialog. To import files of other formats, use the Import Command in the File Menu.

Thumbnails are shown in this area.

Indicates that no thumbnails are shown in case the art work is very small or is colored white.

A pull down list that lets you choose the type of files you can see in the File Name box.

File Management lets you delete a selected file when you click on the Delete File button.

File Management lets you rename a selected file when you click on the Rename File button.

Begin Extrude Dialog Box

Editing an Extrusion: an extrusion can be edited by selecting Edit from the Effects/Extrude menu.

Track Ball: a method of editing and extrusion. The object can be rotated on a 3-dimensional plane.

Vanishing Point: The point at which parallel lines of an extrusion converge. This point can be used to manipulate the extrusion.

Perspective: A method of editing an extrusion which allows the back face to be smaller than the front face, so that the extrusion appears to recede to a vanishing point.

Reset: returns an extrusion to its previous values.

X Coordinate: lets you change the x coordinate (horizontal position) of the vanishing point.

Y Coordinate: lets you change the y coordinate (vertical position) of the vanishing point.

Depth of Extrusion lets you change the depth (thickness) of the extrusion. Depth does not move the vanishing point.

Preview of Extrusion section of the Extrude dialog box lets you see the effects of your work in several different ways.

Wireframe lets you view an outline 3D box that is a simplified view of the extrusion. The object and vanishing points are still manipulated in the same ways while in wireframe mode. The colors will reappear after Done is selected. Using Wireframe is very fast, because you don't have to wait for the object itself to be extruded, nor for other objects behind the extrusion to redraw each time you make a change. Select Apply to preview the final extrusion.

Solid box preview mode lets you view a solid 3D box that is a simplified view of the extrusion. The solid box makes it easier to visualize the effect of the extrusion in 3D, but is slower since objects behind the extrusion must be redrawn each time you make a change. Select Apply to preview the final extrusion.

Side color lets you change the color of the extrusion's sides to one of the named fill colors. The front face of the extrusion will be the color of the original object.

An extrusion is a group consisting of the original object, plus the added side and back shapes that create the appearance of 3D. Therefore, after you click on Done to complete the extrusion, you can select any of the shapes and change their color, line style, etc., just as with objects in any other group, without first ungrouping the extrusion.

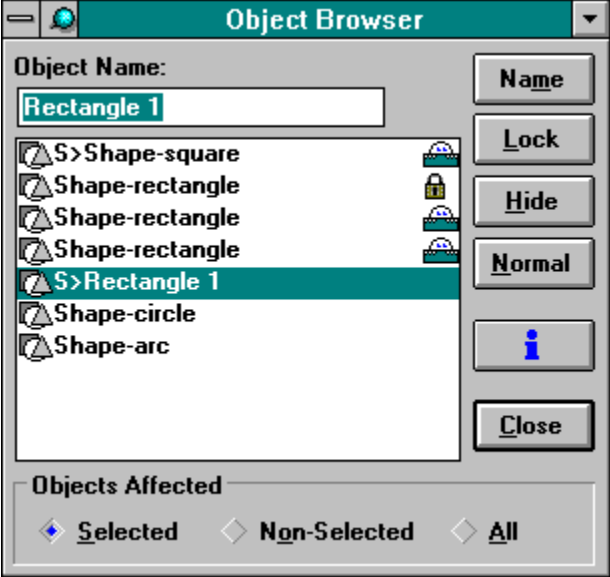
End Extrude Dialog Box

The Number box in this dialog indicates where a typeface falls in the order of all EXPRESS typefaces.

The Size box in this dialog indicates the current size in points of the current typeface. You can enter the desired point size or use the scrolling list to select a size.

Note: There are 72 points in an inch.

This is the sample window. It displays the currently selected type face. It also allows previewing typefaces before applying.



The name button applies the name you gave an object in the object name field.

The lock button lets you lock an image so that it cannot be selected. This allows easier selection in complex drawings.

The hide button lets you hide an object on the drawing area to "make room" to work on your art. It can be considered a "virtual delete key" since the object is not rendered on the screen. Once you set the object to normal, it is rendered.

The normal button returns the selected object back to its visible and editable state.

The **i** button accesses EXPRESS help on the Object Browser.

The close button closes the Object Browser dialog box.

Objects Affected selected allows locking, hiding, and naming of only those selected.

Objects Affected Non-Selected allows locking, naming, and hiding of objects that are not selected.

Objects Affected All allows locking, naming, and hiding of all objects whether selected or non-selected.

The Object Name field lets you name individual objects. Select an object from the list and enter a name. Click on the Name button when done.

The default name of an object. Symbols, clip-art, and segments all have default names.

An object named via the Objects Name field and Name button.

An object locked to the drawing area.

An object hidden from view.

