

Getting Started

This help file contains information on all versions of the Alpha CG software. This manual is not intended to comply as the specification for any particular version of Alpha CG.

Welcome to Alpha CG - a 32-bit object oriented title graphics generator software for Windows. Alpha CG is designed to provide a high level of creativity and ease of use for users of wide ranges of experience. A novice user will appreciate the intuitive user interface, which includes functions such as multiple undo and redo for easy learning and experimentation. Many of Alpha CG's advanced functions have been streamlined to a few simple operations, allowing even a beginning user to create complex title pages with ease after a short exposure to the program.

For an advanced user who demands more from character generation software, Alpha CG offers unmatched power and quality. It delivers superb **anti-aliased titles at less than 1 nanosecond effective resolution**, full color gradient and image texture mapped characters with variable alpha channel transparency, and 32-bit background composition with object manipulation controls.

No matter what your experience level is, Alpha CG has a lot to offer. We hope that you find Alpha CG an indispensable tool in your desktop video production projects.

Using Alpha CG to Generate Title Graphics

Alpha CG is intended to provide a set of useful tools to a broad range of video and graphics professionals. It can be used as a stand-alone title graphics generator by exporting pages in popular output file formats. The exported Alpha CG title pages can then be integrated into other videographics applications, such as paint, presentation and nonlinear video editing software.

Specialized versions of Alpha CG are also available for specific video frame buffers and editing systems. Each version of Alpha CG has additional features that optimize the use of the supported video display hardware. For integrated support of video frame buffers, please contact InnoVision Technology for a list of compatible video hardware.

Before Proceeding

If you haven't already done so, please take a moment to fill out the enclosed registration card and drop it in the mail. Registering your product will activate your access to our technical support resources via phone, fax or mail. It will also allow us to contact you concerning future program upgrades, new products, and special offers. **Technical support is not provided to unregistered users.**

System Requirements

Please take a moment to verify that your system meets the following minimum requirements before installing Alpha CG.

- Pentium 166MHz or faster
- Super VGA card (32,000 colors or higher) supporting 640x480 VGA resolution for NTSC or PAL
- 32 megabytes of RAM
- Microsoft Windows 95, 98, 2000 or Windows NT
- Hard Drive with a minimum of 20 megabytes free space
- CD ROM drive for installing optional TrueType fonts

For optimum performance, the following system configuration is highly recommended:

- A Pentium II or III 450 MHz processor or higher
- 1024x768 XGA resolution with 32-bit (16.7 Million colors)
- 64 megabytes of RAM or higher
- A fast hard drive with at least 7200 RPM

Alpha CG and Screen Mode Resolution

The Alpha CG interface is designed to scale to any resolution setting that your Windows desktop can display. The normal working environment for Alpha CG is 1024x768 XGA resolution with 32-bit color. The edit window size for the NTSC US standard is 720x486. The edit window size for the PAL standard is 720x576. When using a resolution below the normal working environment, the edit window will be scaled down to show the entire page.

Please note the Windows display font must be set to small fonts for proper display of the Alpha CG interface.

NAVIGATING ALPHA CG

Alpha CG Basic Terminology

In Alpha CG, a screen containing text and graphics composition is referred to as a **page**. A group or series of such pages is organized, saved and loaded as one **project**. A project can be reloaded into Alpha CG for later editing. Alpha CG also allows the user to save out a single page or an entire project in a specific graphic image file format for use in other videographics programs.

Each Alpha CG page can contain any combination of **text** (alphanumeric characters) and **graphics**. Graphics can be internally established graphic elements such as boxes or graphic separators, and gradient color spread backgrounds. They can also be image files imported from other paint and graphics software in full-screen or partial screen size. By using priority level assignments, Alpha CG automatically assigns the text elements on a page in the foreground and the graphic elements in the background.

Alpha CG Interface

The Alpha CG interface has been designed to be easy to use. It offers the user the flexibility of accessing most functions and controls through mouse, keyboard or hot key combinations. The most common functions have been iconified on the main interface.

The interface is organized into eight major areas:

- Pull Down Menus
- Toolbar
- Page Controls
- The Edit Window
- Text & Graphics Modes
- Text & Graphics Presets
- The Color Palette
- Text & Graphics Attribute Controls

Pull Down Menus

There are seven pull down menus in Alpha CG –

They are located on the menu bar at the top of the Alpha CG interface. Click on any item below for more information about the functions and controls in each of the pull down menus.

[File Menu](#)

[Edit Menu](#)

[Attributes Menu](#)

[Line Menu](#)

[Page Menu](#)

[Video Menu](#)









[Help Menu](#)

The Toolbar








The Toolbar contains icons for the most commonly used functions. Many are the same functions found inside the menu bars have been made immediately available on the interface, rather than selecting from the pull down menus.

Toolbars allow you to organize the commands in Alpha CG the way you want to so you can find and use them quickly. You can easily move toolbars in order to redesign the interface to your liking.

The commands in the main toolbar are divided into two sections and are as follows:

COMMAND	PULL DOWN MENU	SHORTCUT
 Open	File Menu/Open Project	Ctrl-O
 Save	File Menu/Save Project As	Ctrl-S
 Cut	Edit Menu/Cut	Ctrl-X
 Copy	Edit Menu/Copy	Ctrl-C
 Paste	Edit Menu/Paste	Ctrl-V
 Undo	Edit Menu/Undo	Ctrl-Z
 Redo	Edit Menu/Redo	Ctrl-Y
 Print	File Menu/Print	Ctrl-P

The second set of commands next to the I/O utilities are for text control, object selection, palette controls, and grid placement.

 Left Justify Text	Page/Left Justify	Alt-Shift-L
 Center Justify Text	Page/Center Justify	Alt-Shift-C
 Right Justify Text	Page/Right Justify	Alt-Shift-R
 Flush Justify Text	Page/Flush Justify	Alt-Shift-J
 Justify Top		
 Justify Middle		
 Justify Bottom		



Palette Menu

The palette menu button opens up another window that allows full control over colors and gradients.



Grid On/Off

The grid function overlays a grid on top of the edit menu for precise positioning of text and graphics. Objects can be snapped to the grid for exact alignment.

Page Controls

The Page Controls area, located on the left side of the Alpha CG interface, provides general information about the current page being edited, and it also displays a 'thumbnail' or **picon** (picture icon) list of pages in the current project.

Page Number Box and Page Type

The **Page number box** displays the page number of the current page in the edit window and the total number of pages in the current project. The **Page Type** control, also found in Page Setup command of the File pull down menu, is available here for user convenience. It permits the user to designate one of the three Alpha CG page type options - still, roll and crawl. Alpha CG establishes different page parameters for roll and crawl pages, allowing for a dynamic page length. (Please see the File menu section of the Pull Down menu section for further discussion of Alpha CG page types.)

Creating New Pages

If a project contains multiple pages, these **pages can be accessed in a linear fashion** by using the PAGE UP and PAGE DOWN keys on the keyboard. Pressing PAGE UP will retrieve the **previous page** in the project, and PAGE DOWN calls up the **next page**. If the current page is the last page in the project and PAGE DOWN is pressed, a **new page is created**. A new page can be created also using the command Insert in the Page pull down menu.

Accessing Existing Pages

As stated earlier in this section, both the Page number box and page picon list are used for accessing pages in the current project. The **Page number box**, in addition to displaying the current page number, can accept numeric input from the keyboard to recall a page in the current project and place it in the edit window. Clicking on any of page picons will also **bring the page into the edit window**. **To view other pages in the project**, use the vertical scroll bar to scroll through the page picon list.

Page Picon List

The **page picon list** consists of a display of picons; each of which is a small color representation of one page in the current project. Each page picon has a number below it, indicating the page number in the project. The page annotation to the right of the page number permits the user to enter a unique name for the current page. **To enter a name for a specific page**, left-click the page annotation field. A dialog box will appear for the user to enter an unique name.

The page picon list, as well as the Page number box, can be used for accessing pages in a project, and the discussion is presented in the section labeled Accessing Existing Pages at the end of this section.

Edit Window

The large blue window located in the center of the Alpha CG interface displays the current page being edited in the project. The size of the edit window in pixels is defined in the Page Setup of the File menu. The **safe title area**, a rectangular outline bordering four sides of the edit window, is present by default. It provides an area where text and graphics can be placed and be completely visible regardless of the monitor or television that displays it.

Edit Window and Video Transparency

The default blue area of the edit window represents the video transparent area of a page. The blue color of the edit window makes viewing of edges, shadows and transparency levels easier during an editing session. If the page is exported in a file format with alpha channel support, such as 32-bit Targa file format, the blue area will allow live video to show through when displaying on video hardware that supports alpha channel keying. If the page is exported in a file format without alpha channel support, the blue area will be saved as black with RGB colors of 0,0,0 which will facilitate luminance keying.

Text L-Cursor

An important text editing element is the text cursor or the **L- cursor**, which is represented as a tall vertical line and a short double horizontal line joined at a right angle in the shape of the letter L.. It is present in the edit window unless a bounding box selection is in use while in text mode.

The L-cursor indicates where on screen text will appear when input from the keyboard. The L-cursor can also indicate the current character (the character to the immediate right of the cursor) and the current text line (the line on which the cursor rests) for certain editing operations such as line justification. The cursor's vertical line represents the height of the current font established in the Text mode and the horizontal line displays the baseline of the current text line.

L-cursor Positioning

Adjusting Proportional Font Size with Text Cursor

L-cursor Positioning

In the text edit mode, the L-cursor can be easily repositioned anywhere on screen using either keyboard or the mouse. **To quickly position the L-cursor among existing text**, simply left-click at the desired text, or use the four arrow keys to the left of the numeric keypad. Pressing the down arrow will **move the L-cursor down in a page and create a new line for text entry**.

The rectangular bar along the bottom of the cursor is the **L-cursor position handle**, with which the cursor can be dragged to a new location on screen to indicate where new text will be added. **To position the L-cursor anywhere on a page for new text entry using the L-cursor position handle**, place the mouse pointer on the L-cursor position handle and drag it to the desired location.

Keyboard commands are also available for cursor positioning operations. Pressing the HOME key or the END key will **position the L-cursor to the leftmost or rightmost character on the current line**. Pressing HOME HOME will **move the L-cursor to the beginning of the first line on the current page**; END END will **move the L-cursor to the end of the page's last line**. These last two L-cursor positioning operations are especially useful in jumping to the start or end of a long roll or crawl page.

To delete the character to the right of the L-cursor, use the DELETE key. **To delete the character to the left of the cursor**, use the BACKSPACE key.

Adjusting Proportional Font Size with Text Cursor

A new proportional font size for text entry can be interactively adjusted by using the **proportional font size handle**, the square located on the vertical line of the L-cursor. Dragging the proportional font size handle toward the intersection of the L-cursor will make the font size smaller, while dragging away will make the font size larger. The font size can also be changed by entering a numeric value from the keyboard in the Text mode, and the discussion is detailed in the Text mode section.

Text & Graphics Mode Tools

The Mode Section contains icons pertaining to text and drawing tools which activate the text mode or the graphics creation modes. The text mode allows you to edit all attributes of the text from controls located at the bottom of the interface. On the right side are controls for manipulating the appearance of text. On the left side are tabbed controls for manipulating the attributes placed on the text. Visit the [Text Mode section](#) for full details.

The graphics mode tools allow you to control and create straight lines, boxes, circles and ellipses, and full screen patterns. When entering the graphics mode, the lower right of the interface which contained the text mode information will be updated with graphics controls. The left side is identical to the text mode, only with attributes applied to the current drawing tool. Visit the [Graphics Mode section](#) for details.



Text Mode Tool

This is the default mode of the program. It allows freeform typing to begin immediately on the edit window. The bottom right of the interface contains information on the current font and its attribute settings.



Line Graphics Tool

Draws a straight line with two clicks of the mouse. The first click marks the starting point, the second click marks the endpoint. Line widths can be modified by changing the attributes settings of the line tool.



Rectangle Graphics Tool

Draws a rectangular shape using the current color. The rectangle automatically appears in the lower third portion of the edit window.



Ellipse Graphics Tool

Draws an elliptical or circular shape in the current color or gradient. The bounding box around the ellipse can be manipulated just like any other graphic object. Click and drag the top or right side handles of the bounding box to change the aspect ratio of the ellipse.



Fill Screen Graphics Tool

The paint can icon fills the entire screen with the currently selected color or gradient. The full screen image that appears becomes an editable object, just like the rectangular or elliptical objects.



Import Image

The import graphic button will load a full size or partial-screen size image onto the edit window.

Presets

The **presets area** positioned at the upper right side of the Alpha CG interface displays vertically the attribute presets previously stored using the command **Store as Preset** in the Attributes menu, or function key F2. Please see the [Attributes menu section](#) in the [Pull Down menu section](#) for further discussion of the procedures for storing presets.

Clicking on any of the font presets will **set the current attributes in the Text mode to those of the selected preset**. Clicking on any of the graphic presets will **set the current attributes of the Graphics mode to those of the selected preset**. Once the preset attributes are copied into the menu, they can then be used for affecting new objects, or for pasting to existing objects on-screen.

To view the other presets, use the arrows or the scroll bar to the right of the preset display.

Color Palette

The four columns of **color boxes** situated on the lower right side of the interface contain a set of predefined color schemes that can be used for text, graphics and transparency masks. There are 220 color boxes in an Alpha CG color palette. **To bring the other color boxes in the color palette into view**, click the desired arrow to the right of the color palette to scroll the palette window. Please see the [Palette menu section](#) for further discussion on how to create color schemes in Alpha CG.

OBJECT SELECTION

This section explains in detail the nature and operation of selecting text and graphic objects for editing. Topics include the bounding box selection device and procedures of moving and scaling objects.

Bounding Box Selection Device

The most powerful and useful editing element in Alpha CG is the bounding box. Put simply, the **bounding box** selection device is just that - a selection box activated by the user around (bounding) text or graphics. The amount of text or the number of objects selected can be one character or a single graphic, or all the elements on the entire page, or anything in between. Once the desired objects are selected with a bounding box, they can be easily repositioned or scaled using the mouse. Nearly any text or graphics editing operation such as changing attributes, copying, pasting and deleting can be applied on the enclosed objects in the bounding box.

Drawing Bounding Boxes

The procedures outlined below describe the most common way of drawing a bounding box, starting from the upper left corner of an imaginary rectangle around the desired objects. The same procedures can be applied if using other corners as the starting point.

Bounding Box Basics

Mouse Clicking Selections

Deactivating Bounding Boxes

Adding or Removing Individual Objects from Selection

To select a single character or graphic object with the bounding box, position the mouse pointer on the left side of the object, press and hold the left mouse button, and drag the mouse pointer across the object. Release the left mouse button when the object is enclosed.

To draw a bounding box around a block of text, position the mouse pointer anywhere over the first character at the upper left corner of the text block, press and hold the left mouse button, and drag the mouse pointer to the right across the text. **To draw a bounding box around adjacent text lines**, drag the mouse pointer downward to pass below the text baseline for each desired line. When selecting multiple text lines, the bounding box will readjust to surround entire lines, as opposed to individual characters. When the box encloses all the desired text, release the left mouse button.

To draw a bounding box around adjacent graphic objects, position the mouse pointer on the upper leftmost object, press and hold the mouse button and drag the mouse pointer in the direction that will encompass all desired objects. Release the mouse button when done.

Clicking Method to Select Text

A word or a line of text can be quickly selected using the clicking method. **To select a word**, double-click any character of the word. **To select a line**, triple-click any character of the line. A bounding box will appear enclosing the word or the line.

Deactivating Bounding Boxes

To deactivate the bounding box, left-click anywhere in the edit window and the bounding box will disappear.

Adding or Removing Individual Objects from Bounding Box Selection

Alpha CG provides the capability for the user to randomly select a single existing object and add it to the bounding box selection by using the SHIFT key. The same method is used for removing a bounded object from the selection.

To add an object to the bounding box selection, left-click on the desired object while holding down the SHIFT key. To add additional objects, repeatedly SHIFT-left-clicking on all the desired objects one at a time until the last object is included.

To deselect any included objects in the bounding box, use the SHIFT-click method to deselect a single object in the bounding box.

Advanced Tips in Drawing Bounding Boxes

Since multiple text and graphics elements can be found on an Alpha CG page, selecting the desired objects in the edit window can become more complicated. Here are a few tips that may help in drawing a bounding box:

- Selecting individual overlapped text or graphic objects
- Selecting multiple text and graphic objects
- Drag from any corner of the imaginary bounding box
- Drag starting from an object with lower priority to an object with higher priority level

- **Selecting individual overlapped text or graphic objects**

When selecting objects, the starting point sets the outer limit of the objects that can be included in the bounding box selection. If you have a title with a box behind it, you can select the title itself by dragging the mouse over the letters or you can select the box by itself by dragging only in the area above the letters.

- **Selecting multiple text and graphic objects**

If you have a title with a box behind it, you can drag the cursor across the graphic and the text line to include everything in the selection. It is important to start dragging from one edge of the graphic first, then across the text to the other edge.

- **Drag from any corner of the imaginary bounding box**

The typical bounding box drawing method discussed earlier in this section is to start the process at the upper left corner and end at the lower right. However, a bounding box can be drawn starting from any corner of an imaginary bounding box with an existing object, and then dragging the mouse toward the opposite corner. To draw a bounding box to include the two text lines in the following examples,

ABC
EFGHIJKLMN

start the bounding box drawing process at the lower left or the lower right corner.

- **Drag starting from an object with lower priority to an object with higher priority level**

The bounding box drawing process is priority level sensitive. It will look at the priority of the first object selected and allow only objects with lower priority (closer to the viewer) to be included in the selection. Priority of 0 represents the top level and priority of 255 is the bottom level. For example:

	A	B	C
Priority	1	2	3

To include all three characters in the bounding box selection, start the drawing process from the

character C with the priority level of 3 and drag across the three characters. If the bounding box is drawn starting from the character A with the priority level 1, only the character A will be included in the selection. By default Alpha CG assigned lower priority numbers to text and higher priority numbers to graphics.

To include another object with a different priority, SHIFT-click over any excluded object to include it in the selection.

Moving Selected Objects

There are a variety of ways to move selected objects once the bounding box is activated. If the user wants to fine tune the position of the selected objects in the edit window, this can be accomplished by using the combination of SHIFT and any of the four arrow keys. **To change the position of the selected objects by one pixel in a specific direction**, press the desired arrow key while holding down the SHIFT key.

The horizontal spacing between selected objects can also be changed by using the combination of CTRL and left or right arrow keys. **To change the spacing between the selected objects by one pixel in the horizontal direction**, press the desired left or right arrow key while holding down the CTRL key.

Moving Selected Objects Using Bounding Boxes

The bounding box holds several handles for repositioning and resizing purposes. There are three small rectangular handles which appear along the top and right edges of the box, as well as a bar running along the bottom edge.

The bottom bar in the bounding box is the **position handle**. **To reposition selected objects using the position handle**, position the mouse pointer on the bar, hold the mouse button down, and drag the bar to a new location in the edit window. Release the mouse button when done. For video output it is recommended that text and graphics remain within the safe-title area as indicated on the edit window.

Scaling Selected Objects

Other than using the sizing controls in the Text and Graphics modes, objects can be scaled graphically using the bounding box. The three small rectangles stationed along the top and right edges of the bounding box are the scaling handles. These handles allow selected objects to be interactively resized proportionally or along independent vertical or horizontal axes.

Proportional Scaling

The handle in the upper right corner of the bounding box is the **proportional scaling handle**. Use of this handle will scale selected objects while retaining their original aspect ratios or proportions both horizontally and vertically. **To scale selected objects proportionally**, position the mouse pointer on the proportional scaling handle, hold down the mouse button, and then drag. To enlarge, drag the handle toward the upper right of the edit window. To reduce, drag toward the lower left. When a satisfactory size has been attained, release the mouse button. The objects will regenerate at the new size, and retain any attributes that have been assigned to them.

Vertical and Horizontal Scaling

The other two scaling handles provide the capability of scaling objects along only one of its dimensional axes. On the top edge of the bounding box, the **vertical scaling handle** allows the user to resize objects on the vertical (up and down) axis only, while the width remains the same. On the right edge of the bounding box, the **horizontal scaling handle** enables resizing of the horizontal (left and right) axis while not affecting the height. Both handles are utilized just as the proportional scaling handle described above.

TEXT MODE

The Text mode is the central control center where the user defines various aspects of text attributes. It is divided into two sections at the bottom of the screen: the right side shows text controls, the tabbed menus on the left offer attribute controls. Text controls on the right include typeface selection, type size, kerning, spacing, and position. Attribute controls on the left include face color, outline size, shadow direction and cast transparency. The use of the Text mode and related text attribute controls are documented in this section.

Text Attribute Controls

There are five major categories of text attributes: typeface properties, face, outline, shadow and cast. The selected typeface appears in the area just above the Current Font box in the Text Controls section of the Text Mode, and its related attribute controls are on the right. The other four categories are grouped in a tab submenu system located to the left of the Current Font box.

Current Font

The combined current settings of the attribute controls in the Text mode are referred to as the **current font**. A visual representation of the current font is shown in the Current Font box in the Text mode. Any new text entered in the edit window will have the same appearance as shown in the Current font box.

Adjusting Current Font Settings

There are four methods **to establish the current font for affecting new and existing text**. The most common method is to adjust the individual controls in the Text mode. The second method is to copy the attribute set from an existing character in the edit window using the Copy command in the Attributes menu or the Copy Attributes function key F3. The third method is by clicking on one of the font presets located at the bottom of the Alpha CG interface. The fourth method is to copy the text attributes of an existing character by deactivating the Lock Attributes option in the Text mode. Using any of the four methods will update the attribute settings in the Text mode.

Using Current Font to Affect Text

To use the current font for new text, place the text cursor at the desired location in the edit window and type in the text. **To affect existing text on screen by replacing the attribute sets with those of the current font**, draw a bounding box around the desired text, use the Paste command in the Attributes menu. When using the Paste command, all current font settings will be applied to the text block.

Changing Specific Attributes of Existing Text

The user may often wish to modify certain text attributes of existing text while retaining other settings, but he also may not want to tamper with the current font settings. For example, the user may want to change the shadow size of a block of characters in the edit window without changing their different face colors. At the same time he wants to retain the current font settings for new text entry on another page. Alpha CG provides a quick and convenient way for the user to achieve this operation.

Whenever a bounding box is drawn to enclose existing text on screen, Alpha CG displays the attribute set for the first character of the text block in the Current Font box. The user can modify any desired attribute controls to affect the enclosed text. In the above example, changing the Size control in the Shadow tab submenu will automatically modify the shadows of the bounded text without affecting other text attributes. When the user returns to the text L-cursor mode, the previously established font settings are recalled in the Text mode and Alpha CG is ready for new text entry.

To change a specific text attribute of a text block while retaining other attributes, draw a bounding box around the text, adjust the desired text attribute control in the Text menu.

Defining Typeface

Alpha CG directly supports the TrueType font format and it does not require any additional font conversion to produce anti-aliased text. Any TrueType font installed in Windows will operate in Alpha CG. The name of the currently selected typeface is displayed in the Typeface list box in the Text mode.

Bold, Italic, and Underline Options

The buttons to the right of the typeface selector provide options for creating type with bold, italic, underline, small caps attributes, and any combination in between.

B The **Bold** option will type in a larger, thicker version of the current typeface selected. This option is only available on typefaces that have a bold version installed in the Windows/Fonts directory.

I The **Italic** option displays a slanted, italicized version of the currently selected TrueType font. If the font does not have an italic version installed in the Windows/Fonts directory, a 10 degree horizontal slant to the right will be added to the existing text.

U **Underline**, which is one of the text attributes, draws attention to text and is appropriate for headers and credit rolls. Selecting the Underline option in the Text mode will generate an underline for each new character typed in accordance to the settings established in the Underline dialog box. Additional underline settings are controlled through a dedicated Underline dialog box in the Attributes menu.

To apply an underline to existing text on screen, place the text cursor on the first character of the text block to be underlined, while holding down the SHIFT key, press the UNDERLINE key. Holding down the SHIFT key and the UNDERLINE key again will advance the cursor to the next character to be underlined.

To remove underline for the existing text, follow the same procedures described above.

Changing Font Size and Width




The Size control defines the height of the current font in scanlines. The numeric range for size setting is 5 to 999 (scanlines), with 38 as the default. Alpha CG provides optimal anti-aliasing of text regardless of size.



The Width Percentage (%) is used to alter the proportional width of the current font. If an original proportional font size is desired, which is the default in all cases, the Width Percentage will be 100%. The percentage value, which has the numeric range of 10% to 500%, can be raised or lowered to increase or decrease the font's horizontal scale.

Character Spacing

 Character Spacing affects the amount of space between characters. The character spacing is based on a percentage of the current font size. The numeric range is -50% to 100%, with 16% as the default. A negative number for character spacing represents character overlap. The Character Priority setting at the bottom of the Text mode is used to determine which character will appear on top of the another when text or graphics overlapping occurs.

To increase the character spacing for a text line using the keyboard, place the text cursor on the text line, while holding down the CTRL key, press the right arrow key. **To decrease the character spacing for a text line,** use the CTRL key and the left arrow key.

Character Kerning



While Character Spacing, as a general control, defines the amount of spacing between multiple characters on a line or a page, Character Kerning affects the space between only two characters. It is used as an override for the character spacing already established between the two characters.

Kerning is especially important for adjusting character spacing between irregularly shaped characters. Alpha CG provides built-in automatic kerning between characters, making manual adjusting normally unnecessary. However, radically resized text using the bounding box may require manual adjustment from time to time for optimal output.

To adjust the kerning between two characters, position the L-cursor between the two characters that require adjustment. Left-click the Character Kerning Plus (+) button to increase the kerning, and left-click the Character Kerning Minus (-) button to decrease kerning between two characters. Continue until the preferred setting is reached.

To increase the character kerning using the keyboard, place the text cursor on the text line, while holding down the SHIFT key, press the right arrow key. **To decrease the character kerning for a text line**, use the SHIFT key and the left arrow key.


Bevel




Beveled edges can be applied to either text or graphics. Text objects will be surrounded by an outer edge which produces the appearance of three dimensional chiseled type. Graphic objects created from the drawing tools or images imported into the program will also produce beveled edges which conform to the shape of the graphic. If an imported image has an alpha channel, the alpha channel will determine the shape of the bevel. The bevel size can be up to 50 pixels and can be applied over any color spread or photographic image map.

Lock Attributes

The **Lock Attributes** toggle button is marked by a locked or unlocked padlock icon underneath the current font preview. It is used for controlling whether or not the text attributes will pick up the

 When the Lock Attributes icon is activated, the current font does not change and remains the same as the text cursor is moved among text on a page. This is most useful in typing multiple fonts on a line.

 However, when the Lock Attributes function is deactivated, the text mode is always updated with the text attributes of the character to the right of the text cursor. This function is useful for inserting text in the middle of the text block, or for picking up text attributes of an existing character.

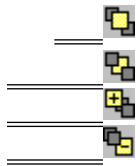
To add characters in a block of text with the same text attributes, deactivate the Lock Attributes option, place the text cursor at the desired location in the text block, and begin typing.

To quickly pick-up the text attributes at the cursor, deactivate the Lock Attributes option in the Text mode. Alpha CG automatically reflects the text attributes of the character to the right of the text cursor in the Text mode. To use the attributes elsewhere to affect text, activate the Lock Attributes option again.

Priority

The Priority function at the bottom corner of the Text controls section provides the user the capability of changing the stacking order of overlapping objects. In Alpha CG, each object on a page can take on a different position in the stack which is defined by the priority level. The range of priority levels is from 0 to 255, with the default text priority level of 64, and graphic priority level of 192. Priority level of 0 represents the top most level, while priority level of 255 defines the bottom most level. Alpha CG, by default, automatically assigns lower priority numbers (0-128) to text objects and higher priority numbers (129-255) to graphics. In a normal title graphic generation, text objects will appear on top of any underlying graphic elements on a page.

To change the priority level of the selected object, enter a numeric value from the keyboard, or left-click on the desired Priority button.



Clicking on the **priority front** button will send the selected object to the top of the stack

The **priority back** button will send the selected object to the back

The **priority plus (+)** button will move the object one position up in the stack

The **priority minus (-)** button will move the object one position down in the stack.

Attribute Tab Submenus

For ease of access, the remaining categories of text attributes are organized into a tab submenu system on the left side of the Text Mode. The four attribute categories are as follows:

- **Face** refers to the interior of a character.
- **Outline 1** defines an optional rim of pixels around the edge of the face character. Outlines are often used to accentuate text to increase legibility.
- **Shadow 1** creates the appearance of solid extrusion directly beneath the edges of the face and outline of a font.
- **Cast** creates the appearance of projecting a semi-transparent, soft-edge shadow-like stamp of the font onto the background of the page.

Clicking on any of the tabs will bring the associated submenu into view. The tab submenu for each attribute category contains controls specific to each category. The following is a list of text attributes relating to each category:

FACE	OUTLINE	SHADOW 1	CAST
Color	Color	Color	Color
Transparency	Transparency	Transparency	Transparency
Bevel	Size	Size	Size
		Direction	Direction

Outline, shadow and cast attributes cannot be applied to full screen backgrounds or images. Alpha CG will ignore settings in those attribute controls.

Since some of the text attribute controls appear in more than one tab submenu and they operate in the same manner, the following section will be devoted to describing these controls.


Establishing Color Attributes

The Color section of the tab attribute submenu is for selecting a color scheme for the face, outline, shadow and cast. The current color scheme is displayed in the Color box of the tab attribute submenu. Any Alpha CG color palette box can be used to define the Color attribute. **To select a color box for the Color attribute**, left-click on the desired color box in the color palette located at the right of the Alpha CG interface.

For user convenience, the Modify Color and Load Picture functions are provided in the tab attribute submenu as shortcuts to quickly change or manipulate the color scheme of the current font.


To modify or create color schemes on the entire palette, you must click on the palette icon in the top toolbar to enter the Palette Menu.

Modify Color

 The Modify Color function allows the user to quickly adjust the color scheme of the current font or bounded objects. Clicking on the Modify Color button will display the Palette menu. Any of the Palette menu controls and functions can be used to alter the current color scheme.

The newly modified color scheme in the Palette menu is not associated with any color box in the palette. Using the Update button at the bottom of the Palette menu will allow the user to save the new modified color scheme in the color palette. **To save the adjusted color scheme into the color palette**, left click the Update button, and then left-click on the color box where the new color scheme is to be saved.

Load Picture for Texture Mapping

 Pictures are often used for texture mapping onto the face and outline of characters to enhance the appearance of text. The selected picture will fill the interior of the face or outline when texture mapping is performed in Alpha CG. Clicking on the Load Picture icon will activate a file loading dialog box where the user can select an image file to be used as the source of texture mapping.

To apply an image texture map to any of the attributes, it is recommended that the size of imported image file be slightly larger than the size of the character to be texture mapped. However, if the image picture is smaller or much larger than the character, Alpha CG will automatically scale the image to fit into the face or outline of the character.

Alpha CG supports the following 24-bit file formats for texture mapping of text:

- Bitmap (.bmp)
- Targa (.tga)
- MAC PICT (.pct)
- Kodak Photo CD (.pcd)
- Compuserve GIF (.gif)
- TIFF (.tif)
- PC Paintbrush (.pcx)
- JPEG (.jpg)
- Amiga IFF (.iff)

Setting up Transparency Attributes

The controls in the Transparency section allow the user to establish transparency settings for the text or graphics face, outline, shadow and cast attribute. This function is especially important for compositing multiple layers of text, graphics and backgrounds. The transparency function utilizes **alpha channels** to create the appearance of 'see-through' text or graphics which blends over the underlying layers of other elements and full screen backgrounds.

There are three ways of applying transparency effects to selected objects and attributes:

1. Type in a percentage of transparency from 0 to 100%.
2. Select or modify an existing color palette box as an alpha channel map.
3. Select a picture to be used as an alpha channel map.

For our discussion, the term visibility and transparency are often used interchangeably. 0% visibility is equal to 100% transparency, and 100% visibility is equal to 0% transparency.

Transparency Level and Grayscale Value

Alpha CG defines the transparency levels in terms of grayscale values ranging from black to white. A visual representation is displayed in the Transparency box. The color black represents 100% transparency, where text is completely transparent over underlying layers of graphics and background. The color white represents 0% transparency, where text is completely visible over underlying layers of graphics and background. The range of gray colors represents varying degrees of transparency where lighter shades are more opaque, and darker shades more transparent. This allows the creation of dynamic alpha channel transparencies which would be tedious to create by other means.

Adjusting Transparency Level Using Percentage Control

The Transparency Percentage control provides a convenient way to establish uniform transparency levels for text. Each face, outline, shadow and cast can take on a different transparency level. The numeric range for the Transparency Percentage setting is 0% to 100%, with 0% the default for all attribute categories except for Cast. The Cast Transparency Percentage is set to 25%. The lower the transparency percentage, the more visible the text appears over underlying layers of graphics and background.

Customizing Transparency Level Using Color Boxes


The custom transparency function is available for all text or graphic objects. In Alpha CG, any color boxes in the color palette can be used to establish the face transparency level. **To assign a color box for the Face Transparency attribute**, left-click the Custom button and then left-click on the desired color box in the color palette.

When a non-grayscale solid color or color gradient color box is selected for the face transparency attribute setting, Alpha CG converts colors into grayscale levels. A single color, converted to one grayscale color, will yield an uniform transparency for the face of the character. A multi-color gradient, converted to multi-grayscale pattern, will yield a variable transparency pattern for the text.

For example, a color box containing a black to white gradient pattern is selected for the face transparency. The top of the face will have 0% transparency (i.e., completely visible) and the bottom will have 100% transparency. The middle of the character will have increasing degrees of transparency.

Because the conversion of a non-grayscale color to a grayscale color does not always produce obvious results, it is highly recommended that grayscale colors be used when establishing custom Transparency attributes.

Using Images as Alpha Channels

 The Alpha button allows images to be used as alpha channels. Just as images can be texture mapped onto text or graphics attributes, they can also be used as transparency texture maps. This means that when an image is selected to be mapped onto a transparency, it will utilize the lighter colors in the image as solid, and the darker colors as transparent. This opens myriad possibilities of transparency effects for text or graphics objects.

Transparency Levels and Video Keying

The default blue edit window without any text and graphic elements will appear completely transparent when keyed over video, and will show 100% video. When new text and graphics are created on the page and then keyed over video, the video transparency of the text and graphic elements will vary depending on the Transparency setting established in the Text and Graphics modes and their placements on the page.

For example, if a 50% transparent text is placed in the edit window with no graphics or backgrounds behind it. When the page is keyed over live video, the text will appear 50% transparent over video. If the same 50% transparent text is partially overlapping on a completely non-transparent beveled box, when keyed over video, a part of the text will appear 50% transparent over the beveled box and the other part will appear 50% transparent over live video.

Changing Size and Direction Attributes

The Size attribute only applies to outline, shadow and cast. The Size attribute setting refers to the thickness or distance of the applicable attribute category in pixels. The Size setting of 0 turns off the attribute type. The following details the numeric ranges and default values of the Size attributes for outline, shadow and cast:

	Numeric Range	Default
Outline	0-16	2
Shadow	0-64	4
Cast	0-99	0

Direction control for shadow and cast can be adjusted by clicking on the Direction attribute button in the respective tab submenu. There are eight available direction settings, with each click rotating the shadow or cast 45 degrees.

GRAPHICS MODE

The Graphics mode is the central control center where the user can create various aspects of text attributes. Clicking on any of the drawing tools, such as line, rectangle, ellipse, and fill background tool, will bring up the Graphics mode. As in the Text mode, it is divided into two sections at the bottom of the screen: the right side shows image controls, the tabbed menus on the left offer graphics attribute controls. All attributes that are available in Text mode for typefaces are available for each graphic object. Graphics controls on the right side include image height and width in pixels, height and width measured as a percentage, beveling, position, and priority. Attribute controls on the left include face color, outline size, shadow direction and cast transparency. The use of the Graphics mode and related attribute controls are documented in this section.

[Using Graphic Elements](#)

[Adding Graphic Elements](#)

[Selecting Load Picture Options](#)

[Managing Imported Images](#)

[Selecting Existing Objects for Editing](#)

[Resizing Graphic Objects](#)

[Beveling Graphic Objects](#)

[Adjusting Priority for Graphic Objects](#)

[Graphic Attribute Tab Submenus](#)

Using Graphic Elements

A **graphic** element in Alpha CG can be described as any non-text object; an imported image file, either full screen size or partial screen, a line, box, circle, or a full screen background. As many as 99 graphic elements can be composited into a background in an Alpha CG page. The graphic elements in Alpha CG can be freely edited any time; they do not become permanently locked into the background when they are placed in the edit window.

Adding Graphic Elements

The options available in Alpha CG to add new objects to the background are located on the Graphics toolbar, immediately to the right of the edit window. The line, rectangle, ellipse, and fill background icons allow you to create on new graphics and enable the Graphics mode. The last icon, load picture, involves importing image files from external storage device.

To add a graphic object, follow the steps detailed below:

1. Establish the attribute settings for the new object by adjusting the controls in the Graphics mode.
2. Left click on the desired drawing tool icon. The new object will automatically appear on screen.
3. If desired, select the object, position or scale it using the handles on the bounding box, or adjust controls in the Graphics mode to affect the attribute settings.
4. To deselect the object, left click anywhere in the edit window.


To perform multiple image compositing, repeat the above steps by utilizing the Add Picture icon until all the graphics are created.

Draw Line



The line tool takes the currently selected attributes and draws a straight line on the screen. Right-clicking on the icon will enable changes to be made on the thickness of the line.

Draw Box

 The Add Box function adds a box to the current page as a graphic background element. Boxes, sometimes referred to as graphics separators, have a variety of uses in videographics design. Texture mapping a beveled box for over the shoulder graphics or creating a semi-transparent box for lower third box are some examples of the common usage of boxes. If a beveled box is desired, select the Bevel Size option in the Face attribute submenu.

Draw Ellipse



The Ellipse tool draws an elliptical object on the screen with the currently selected attributes. The Ellipse can be resized and rotated once it appears on the screen using the sizing gadgets on the cursor.

Fill Background



Clicking on the Fill Background button in the Graphics mode will allow the user to create a full screen background utilizing any of the Alpha CG's color boxes. The full screen background appears automatically in the edit window with a bounding box, ready to be manipulated further.

Add Picture



The Add Picture function allows the user to import full screen or partial screen images into Alpha CG for use in composing backgrounds. Clicking on this button will bring up a file loading dialog box from which an image file can be selected.

Supported Image File Formats

Alpha CG can import the following popular file formats - TIFF, TGA, JPEG, PICT, PCX, BMP, Amiga IFF, and Kodak Photo CD. Any 24-bit images in the above file formats can be used for graphics and background creation. In addition, Alpha CG supports the 32-bit TGA image file format. This file format has a built-in alpha channel component which is often used for keying and masking.

Selecting Load Picture Options

Once a picture file has been selected from the file dialog box, the **Picture Load Options** dialog box will appear where the user can specify how the selected image to be loaded into Alpha CG.

The Picture Load Options contain the following:

Load Size Option

Position

Ignore and Invert Alpha Channel

Black Trim

Load Size Option

The **Load Size Option** allows the user to adjust the size of the picture to be imported. The **Original Size** option, if selected, will import the image in its original size. The **Fit to Edit Window** option, depending on the aspect ratio of the original image, will proportionally scale the original image to cover the entire edit window. The **% Edit Window Size** option will proportionally scale the original image to match a percentage of the edit window's height or width, while maintaining the original aspect ratio.

Position

If the original size of the imported picture is less than the edit window size, the user can choose a placement position for the imported graphic.

Ignore and Invert Alpha Channel for 32 Bit Images

The **Include Alpha Channel** option is used in conjunction with importing 32-bit picture file. If the option is not selected when importing a 32-bit graphic, Alpha CG will load only the 24-bit color portion of the image. The 8-bit alpha channel transparency information will be ignored. If the Include Alpha Channel option is selected, Alpha CG will import all 32 bits of data, including the 8-bit alpha channel information.

Invert Alpha Channel option is used for creating key hole effects. Each black pixel in the alpha channel will be replaced by a white pixel, and a white pixel with a black pixel. The gray pixels will be replaced with mirrored gray values in the black to white color spectrum.

Black Trim for 24 Bit Logo Files

For an imported image such as a 24-bit logo file, the user can select the **Black Trim** option to remove the black pixel areas with RGB values of 0,0,0 surrounding the logo . The color black in this option is treated effectively as transparency color (similar to the color zero transparency function found in palette based systems). Alpha CG will automatically anti-alias the logo edge against the page background or video.

Be sure the logo file is saved in a 24 bit file format when using the Black Trim option. The Alpha CG image loading library does not recognize monochromatic images or 8-bit images.

Managing Imported Images

When an image is retrieved from the hard disk drive for texture mapping text and graphics, or for creating background imagery for a page, Alpha CG stores information about the location of the image file. When the page is subsequently accessed, Alpha CG will use that information to locate the imported file. If the image file cannot be found at the original location, Alpha CG will prompt the user to re-select the location of the image file. If the prompt is ignored, it will fill the graphic with black.

It is highly recommended that proper file management be observed. Ideally, imported picture files should be kept in a fixed hard drive rather than in other removable media, such as CD ROM. Whenever a picture file is loaded from a removable drive, Alpha CG will prompt the user with the option of saving the file in the hard drive. The picture file will be saved in the current project folder. Alpha CG will then load the picture into the current project folder directly so it can be referenced whenever the graphic is needed in Alpha CG.

Selecting Existing Objects for Editing

To select an existing graphic element to edit, use the bounding box selection method described in the Object Selection section; or if an object is already selected on screen, left-click on the Select Next or Select Previous button until the desired object is reached. The **Select Next** and the **Select Previous** functions are especially useful when editing a page containing several layers of composited images and graphics.

When an object is selected, the object element is enclosed by a bounding box. A visual representation is displayed in the Current Graphic sample box. The user can perform editing operations such as copying, deleting, positioning, and scaling, or affecting the attribute controls in the Graphics mode.

To deselect an object, left-click anywhere on screen.

Resizing Graphic Objects



The first four functions on the graphics controls section deal with resizing graphics that have been loaded into the edit window. Scaling a graphic object can be done by using these functions in the Graphics mode, or it can be done interactively by dragging the scaling handles on the bounding box with the mouse. Dragging on the proportional scaling handle will scale the object proportionally. Dragging on the vertical scaling and the horizontal scaling handles will affect the height and width of the current graphic, respectively.



The **resize** functions allow the user to input specific values from the keyboard. The size of the current graphic, expressed in both pixels and percentage, are displayed in the **Height** and **Width** controls. The user can input the desired values directly into the 4 number boxes to scale the current graphic.


PALETTE MENU


The Palette menu is used to establish and edit the color schemes in the Alpha CG's color palette. The color palette is utilized frequently when working with text and graphics to specify the color attribute of an object. This section will describe the controls and functions of the Palette menu and the procedures on how to create color schemes in Alpha CG.

Color Boxes

The color palette which splits into rows (or banks) of color boxes is located at the upper portion of the screen directly below the menu bar. When in the Palette menu, all 220 color boxes in the color palette are visible on screen for editing. The color box currently selected for editing is highlighted. For easy viewing, a larger representation is located in the sample box labeled Current Color in the Palette menu.

Palette Load and Save, Undo and Redo

The current palette of color boxes can be saved for later use by clicking on the **Palette Save**  button.

And a previously saved palette can be retrieved by activating the **Palette Load**  function. For easy file recognition, Alpha CG saves the current palette with the unique file extension of .pal.

Saving Palettes with Alpha CG Projects

When an Alpha CG project is saved to disk for later retrieval, the associated color palette is also saved. For Example, if the project is saved under the name of NEW_PROJECT, the associated color palette will be saved as NEW_PROJECT.pal in the same project folder. Loading a previously saved project will also retrieve the associated color palette. The default color palette in Alpha CG named Alpha_CG.pal is loaded for every new project.


Palette Undo and Redo





Undo and redo buttons are placed in the Palette menu in order to restore changes made to palette colors. This provides an easy way to differentiate between the old color and new color by toggling the two different colors for validation.


Types of Alpha CG Color Schemes

A **color box** can contain any of the four Alpha CG's color scheme types - solid, linear, 4 point or circular.

 **Solid color scheme** generates a single color, while linear, 4 point and circular color schemes produce multi-color gradient spreads.

 The **linear color scheme** creates linear bands of color.

 In the **circular color scheme**, colors form circular color rings around a center point.

 The **4 point color scheme**, primarily used for full screen background spreads, yields a color blending pattern with each base color radiating from a corner of the color box.

Switching between color scheme options should be done with care. It will permanently alter the configuration of the color box. For example, switching from a multi-gradient color scheme to a single color scheme will result in erasure of colors. Alpha CG will configure the color box with a single color from the previous color gradient.

[Positioning Center of Circular Gradients](#)

[Copying Color Boxes](#)

[Swapping Color Boxes](#)

[Color strip and Color Indicators](#)

[Number of Color Indicators](#)

[Adjusting Position of Color Indicators](#)

[Creating a Sharp Boundary in Color Gradients](#)

Positioning Center of Circular Gradients

Other than displaying the currently selected color box, the Current Color box also controls the central positioning of a circular color scheme. **To change the central location of the circular color scheme**, left-click on the desired location in the Current Color box in the Palette menu. **To reset the circular color gradient to the default central position**, left-click on the option button labeled Circular.

Copying Color Boxes

The Copy button is used to copy the color scheme of one color box into another. **To copy the currently selected color box**, left-click on the Copy button, and then left-click on the desired destination box in the color palette.

Swapping Color Boxes

The Swap button is used to exchange the color schemes of two color boxes. **To swap the color scheme of the currently selected color box with another color box**, left-click on the Swap button and then left-click on the desired color box to be swapped in the color palette.

Color strip and Color Indicators

A solid color scheme has one base color; whereas a **gradient color spread** has two or more **base colors**. For example, in a black to white gradient, the base colors are black and white. All the base colors in a color scheme are displayed horizontally in the **color strip** located below the Current Color box in the Palette menu. Each individual base color is represented by a triangular **color indicator** situated just beneath the color strip. **To select a base color for editing**, left click the desired color indicator. The currently selected color indicator is now highlighted, and the base color is displayed in the small box under the Base Color section of the Palette menu.

The RGB/HSV values of the color indicators can be changed using the controls in the section labeled Base Color in the Palette menu. The Indicator section contains functions for editing and manipulating color indicators. (See the respective sections later in this section for further explanation.)

Number of Color Indicators

In a color box containing a solid color, one color indicator will appear in the color strip. The 4 point color gradient will have a maximum of four color indicators. As many as 20 colors indicators can be used for linear and circular color gradients. Alpha CG automatically adjusts the number of color indicators when switching from one color scheme to another.

Adjusting Position of Color Indicators

To change the position of a color indicator, drag the color indicator to the left or right until the desired location is reached. The relative position and spacing of color indicators determines the rate of tapering between the base colors in a color gradient. This is especially important in the linear and circular color schemes. Each color indicator marks the point at which a base color in the color strip blends outward toward another. If the color indicators are set far apart, a smooth blending occurs between the colors. If the color indicators are set close together, the resulting color gradient will appear more abrupt. The position and spacing of color indicators can be changed to achieve a variety of color gradient effects.

Creating a Sharp Boundary in Color Gradients

Two color indicators can occupy the exact same position in the color gradient strip to create a sharp boundary between two colors in a color gradient. **To create a sharp boundary in a color gradient**, drag one of the two color indicators left or right until it reaches the exact location of the other color indicator. When a color indicator is dragged on top of another indicator, the indicator that was moved will overlap the second indicator. The color gradient generated will have the color on the right side corresponding to the top color indicator and the color on the left side corresponding to the bottom indicator.

Editing Color Indicators

The Indicator section of the Palette menu consists of functions to edit color indicators.

The Add, Delete, and Clear buttons are used to edit the current color gradient.

The buttons Space, Shift, and Invert provide a quick way to easily manipulate a color gradient without going through numerous steps.

Add



The **Add** button is used for adding a new color indicator. The color of the new indicator will be based on the color that is currently displayed in the current base color box. A highlighted triangular color indicator will appear in the color strip.

Delete



To delete a currently selected color indicator, left-click on the Delete button. The color indicator will disappear.

Clear



The **Clear** function is used to remove all color indicators in a gradient except one color indicator.

Space



The **Space** function allows the user to define a evenly spaced color gradient without adjusting each color indicator manually

Shift



The **Shift** function moves the color indicators one position to the left while maintaining the current spacing between the indicators.

Invert



The **Invert** function reverses the order of colors and spacing of the color indicators.

Rotating Linear Color Gradients

The **Rotate Gradient** slider, represented by the horizontal scroll bar, is used to determine the Z rotation of the linear color gradient. It does not affect the solid, circular and the 4 -point color schemes. The numeric range of the Rotate Gradient slider is 0 degrees to 360 degrees, with 0 the default.

Current Base Color

The **current base color** is defined by the highlighted color indicator in the color strip. The color is displayed in the small sample box in the Base Color section of the Palette menu. The current base color can be changed by using the color sliders in the Base Color section of the Palette menu.

Video Safe Color Option

Color Mode and Color Sliders

Video Safe Color Option

Colors which use higher saturation levels, those over approximately 75%, will in most cases produce 'bleeding' and color distortion when converted to NTSC or PAL video. The 75% level is indicated by the saturation value of 192. **To establish video safe colors**, select the option labeled Video Safe, or simply change the saturation level to no higher than 192, represented by the S slider in the HSV color mode.

The Video Safe option, if activated, will not change the values in the RGB/HSV sliders. Instead, any object will be adjusted for video safe colors when it is displayed in the edit window and the preview output monitor. Anytime this option is not selected, all color rendering in Alpha CG will be based on the entered RGB/HSV values.

Color Mode and Color Sliders

The two **color modes** available in Alpha CG are RGB and HSV. The **RGB mode** will configure each of the three color sliders, the horizontal scroll bars located below the current base color box, as one of the primary video colors (Red, Green, or Blue). The **HSV mode** will configure the three sliders as Hue, Saturation, and Value. The RGB mode is the default.

The color sliders can be adjusted individually for each of the RGB/HSV color components. The numerical range for each RGB/HSV slider is 0 to 255. For example, an RGB value of 255, 0, 0 will yield pure red. The current numerical value of each slider is displayed in the input boxes to the right of the color sliders.

The OK and Cancel Functions

The purpose of the cancel function is to return the color schemes of the color boxes to the state when the Palette menu was first accessed. Alpha CG will ignore all operations performed to the color boxes.

To exit the Palette menu and return to the Text mode, left-click on the OK button. The user can also enter any of the Alpha CG's primary menus by activating any of the menu buttons located in the upper right corner of the Alpha CG interface.

Updating Color Boxes

When the Palette menu is accessed by activating the Modify Color button in the Text or the Graphics mode, the extra function **Update Color Box**, is made available for the user to save the modified color scheme in the color palette. When the Palette menu is accessed through the Palette button at the top of the Alpha CG interface, a color box is always highlighted for editing. Adjusting any controls in the Palette menu will automatically update the color box in the color palette. However, when the Palette menu is accessed via the Modify Color function in the Text or the Graphics mode, the edited color scheme is not linked to any of the color boxes in the color palette. Alpha CG provides the user the Update Color Box option to save the newly modified color scheme in one of the color boxes for later use.

To save the newly modified color scheme in a color box when accessing the Palette menu via the Modify Color function in the Text or the Graphics mode, left-click the Update Color Box button in the Palette menu, and then left-click on the desired color box in the color palette to store the modified color scheme.

PULL DOWN MENUS

There are seven pull down menus in Alpha CG –

They are located on the menu bar at the top of the Alpha CG interface. The functions and controls for each of the pull down menus are discussed in this section.

File Menu

Edit Menu

Attributes Menu

Line Menu

Page Menu

Video Menu

Help Menu

File Menu

Most commands in the File menu are related to the basic file operations such as saving and loading of projects. Also appearing in the File menu are commands for setting up page parameters.

Project Management Commands

Exporting Pages & Projects

Exporting 32 Bit Key Pages

Saving Roll/Crawl Files

Importing Text

Project Management Commands

The first three commands in the File Menu - New Project, Open Project, and Save Project control the basic project management tasks. An Alpha CG **project** is defined as pages organized, saved and loaded as a group. The number of pages in a project can range from 1 to 999 pages.

Selecting any of the project management commands will activate a dialog box where the specific file operation will be executed. When the **Save Project** command is activated, it creates a folder bearing the user defined project name. The project file with an .acg file extension is saved in the folder. The associated color palette with a .pal file extension for this project is also saved. **Please note that all Alpha CG projects must be saved in the sub-directory named alpha_cg\projects\ for the project to be displayed correctly when subsequently retrieved.**

Any time Alpha CG is launched, a **new project** is opened and it is ready for the user to create title pages. If desired, however, the user can recall a project previously saved by using the **Open Project** command. **To open a previously saved project**, select the Open Project command. When the Open project dialog box appears on-screen, left-click on the folder where the desired project file is located, and then left-click on the desired project file with the file extension .acg. Alpha CG only allows one project to be opened at a time.

Exporting Pages and Exporting Projects

The next two items, Export Page As and Export Project As allow the user to save out the current page or project in a specified image file format. These pages can then be utilized in other videographics applications. Unlike the Save Project command previously discussed in the last section, image files saved with these two commands will no longer be editable when re-loaded back in Alpha CG; although they can be used in Alpha CG as full screen background images for graphic composition.

The following is a list of export picture file formats supported by all versions of Alpha CG:

- 24-bit Bitmap (*.bmp)
- 24-bit TIFF (*.tif)

- 16-bit Targa (*.tga)
- 32-bit Targa (*.tga)
- 24-bit PC Paintbrush (*.pcx)
- 24-bit MAC PICT (*.pct)
- 24-bit JPEG (*.jpg)
- 24-bit Amiga IFF (*.iff)

Other hardware specific file formats are included depending on the version of Alpha CG installed.

The **Export Page As** allows the current page displayed in the edit window to be saved as an image file. The **Export Project As** command saves all the pages in the current project. When saving the current project in a specific image file format, the user can input a file name with up to five alpha numeric characters. Alpha CG will save the pages in a special file naming convention of filenamexxx, where xxx represents the page number in the project. For example, filename001, filename002 and so on.

Exporting 32 Bit Key Pages and Video Defringe Option

The video defringe option in the Video pull down menu is especially important when exporting 32-bit key pages to be viewed over video. The defringe function removes the fine black rim around the edges of light colored text and graphics in a key page that does not have black edge attributes. When the defringed key page is subsequently viewed over live video, the key edges of text and graphics will retain the highest level of anti-aliasing. By default, the video defringe option in the Video menu is on.

For further explanation on the Video Defringe function, please see the Video menu discussion later in this section.

Saving Roll or Crawl Files

If a roll or crawl page is saved in a file format that does not support extended page lengths, Alpha CG will only save the page defined by the edit window size, and some of the screen page content will not be saved. If a file format can support extended page length, Alpha CG will save the entire roll or crawl as a single extra wide or extra tall graphic file. The roll and crawl file formats exported will depend on the hardware and software supported by Alpha CG.

Importing Text

The **Import Text** function allows for text files to be imported, especially useful in a long roll page. Alpha CG supports the following formats:

- ASCII Text (.txt)
- Windows Words (.doc)
- Write (.wri)

Before importing a text file into Alpha CG, all text attributes that are to be applied should be established in the Text mode. The Page Type should be selected beforehand, particularly in a roll page, as well as other text settings such as page justification, character and line spacing. Word wrap option is automatically applied to text import when appropriate.

Edit Menu

The commands in the Edit menu are functions applied to selecting and editing objects. They are usually used in conjunction with the bounding box selection device.

Undo and Redo Commands

Copying and Cutting Text and Graphics

Paste

Object Selection

Undo and Redo Commands

The Undo and Redo are powerful functions which make experimentation easy in Alpha CG. These commands are also located at the lower right corner of the Alpha CG interface. The **Undo** button allows the user to erase the last edit operation. The **Redo** button will cancel an undo operation after an undo command is performed. Both functions can be accessed using the function keys F11 or CTRL-Y for Redo and function key F12 or CTRL-Z for Undo. The undo function can be used repeatedly to undo up to 32 of the most recent edit operations.

Copying and Cutting Text and Graphics

The **copy** function allows enclosed object to be duplicated from its current location, to be later deposited in a new area of the same page or to a different page within the project. **To copy using the Edit Menu**, select the desired text or graphic using the bounding box, and then select the Copy command. The selected text or object will be copied into an internal copy buffer. The hot key combination for the copy function is CTRL-C.

The **Cut** function works in a similar manner as Copy, except that it removes the selected object that has been copied from its original position. **To cut using the Edit menu**, select the desired object using the bounding box, and then select the Cut command. The hot key combination for the cut function is CTRL-X.

Paste

The **Paste** function will paste text or graphic that has been copied or cut. **To paste text or graphic that has been copied or cut to a new location**, select the Paste command. The graphic object will appear on screen. The user can then use the bounding box to position the object to the desired location on the page. The hot key combination for the copy function is CTRL-V.

Object Selection

The first three Select commands in the Edit menu provide a convenient way for the user to select a specific

type of objects to be included in the bounding box selection. **Select All** command will select all text and graphic objects on a page. **Select Text** will select text objects only, and **Select Graphics** will include graphic objects only.

Attributes Menu

The commands in the Attributes menu are for copying and pasting attribute settings of text and graphics, storing the current text or graphic attributes as a preset for later use, and establishing text underline parameters. Attributes constitute the visual appearance of text or graphics which are defined in the Text and Graphics modes. Alpha CG retains two separate sets of attributes, one for text and one for graphics. Please see the Text and Graphics mode sections for the discussion of how to establish attribute settings.

Copying Attributes

Pasting

Recalling Default Attributes

Storing Attribute Presets

Pasting with Attribute Presets

Establishing Underline Parameters

Copying Attributes

The **Copy Attributes** command copies all attributes applied to the current object. Once an attribute set is copied, it will appear in the Current Font or the Graphic box. The copied attribute set can be used for new text entry or graphic generation. If desired the user can apply the attribute set to any existing selection by using the Paste Attributes command.

Both menu and keyboard commands are available for copying attributes. To **copy an attribute set from existing text on-screen using the Edit menu**, position the text cursor to the left of a character retaining the attributes to be copied or draw a bounding box around the character, and then select the Copy Attributes command. To **copy an attribute set from an existing graphic object using the Edit menu**, draw a bounding box around the desired object and select the Copy Attributes command. To **copy an attribute set using the keyboard**, use function key F3.

Pasting Attributes

The **Paste Attributes** command will apply the copied set of attributes to text or graphic objects selected with a bounding box. If no text is selected with a bounding box, all of the copied text attributes will be pasted to the current character only (to the right of the text cursor).

Both menu and keyboard commands are available for pasting attributes. To **paste the copied attributes to existing on-screen text or graphic using the Edit menu**, draw a bounding box around the object to be affected, and select the Paste Attributes command. To **paste the copied attributes using the keyboard**, use function key F4.

Recalling Default Attributes

Since text and graphic attributes are carried forward during an edit session in Alpha CG. After making numerous adjustments to the menu, the user may wish to return all attributes settings back to the default values. By activating **Recall Defaults** command, all attribute settings and values are reverted back to those found when Alpha CG is first launched. The user can also use the function key F1 to activate the Recall Defaults command.

Storing Attribute Presets

Alpha CG offers the capability to store favorite text or graphic attribute sets for immediate recall. With the **Save as Preset** command, the current attribute set in the Text or Graphics mode can be saved into a preset buffer. The visual representations of all the previously saved attribute presets are displayed online at the bottom of the Alpha CG interface.

To store the current attribute set as an attribute preset, select the Save as Preset function in the Attributes menu, and then click on an attribute preset box at the bottom of Alpha CG interface. **To store an attribute preset using the keyboard**, press function key F2.

To use an attribute preset, click on the desired preset. The attribute preset will automatically appear in the Current Font or Current Graphic box and it is now ready to be used for new text entry or new graphic creation.

Pasting with Attribute Preset

If an existing on-screen object is enclosed with a bounding box, clicking on one of the attribute presets will paste the preset attributes to the selected object. The current attributes in the Text or Graphics mode are not affected. **To paste a preset attributes to an on-screen object**, draw a bounding box around the desired object, click on the desired attribute preset.

Establishing Underline Parameters

Underlines draw attention to selected text and are appropriate for headers. They are also useful as graphic separators or 'spacers' on a roll page. The Underline option is available in the Text mode to activate an underline. The **color, height and offset** of the underline for text is determined by the settings established in the Underline menu.

Underline contains a global setting that applies to all text for a particular page. Each page in a project can have its own underline settings. Once the parameters are changed in the Underline dialog box, they will carry forward to subsequent new pages. **To change the RGB color, height and offset of underline**, select the Underline command, and then adjust the desired parameters. The default underline color is red with RGB values of 192-64-48. The numeric range of the Underline Height is 1 to 32 pixels, with 4 as the default. The offset represents the vertical distance in pixels from the text baseline to the underline. The numeric range for Underline Offset is +128 to -128, with 4 as the default. Entering a negative value for offset will shift the underline upward from the baseline of the text.

Line Menu

The Line Menu provides commands for editing lines, adjusting line spacing and justifying text lines. A **text line** can be considered as the horizontal 'space' that text can rest on. It includes all lines with text and the empty line where the text cursor is positioned. Also, any time a text cursor is dragged to a new position for new text entry in the edit window, a new line is created.

The Line menu does not contain any of the cut, copy and paste line editing commands. These line editing operations can be easily achieved by using the bounding box, and then applying the Cut, Copy and Paste commands in the Edit menu.

Line Menu Commands and Freeform Text Layout

Clearing, Deleting, and Inserting Lines

Changing Line Spacing

Justifying Lines

Line Menu Commands and Free Form Text Layout

The Line menu commands are designed to be used in a fixed form text layout where specific line spacing and justification are desired for the entire page. This type of layout is often found in a roll page or a still page containing a table. However, Alpha CG provides the added capability of free form text layout where characters and lines can be positioned anywhere on-screen with overlapping control. Using the Line menu commands in a free form text layout may sometimes produce undesirable results.

All the Line menu commands discussed in the following section, unless otherwise noted, can be used in conjunction with the text cursor or the bounding box for a fixed form formatted page. It is highly recommended that the bounding box be used in a free form formatted page. Before activating any of the Line menu commands, use either methods to select the desired text line.

Clearing, Deleting and Inserting Lines

The first three commands in the Line menu are for clearing, deleting and inserting text lines. **Clearing a text line** will clear the text in the current line, but not the horizontal space. **Deleting a text line** will clear the text and the horizontal space of the selected line. Any existing lines that were underneath it will be readjusted upward to fill in the space.

Inserting a line works only in text cursor mode, where the user can define whether a line is to be inserted before or after the current line. If this command is activated, a new text line will be inserted and all lines underneath is repositioned downward on the page. Using the INSERT key from the keyboard will insert a line before the current line.

Changing Line Spacing

Line spacing controls the vertical empty space in between successive lines of text. Use of the line spacing command may be necessary if font sizes are changed after text has already been entered, or if different font sizes are used on the same text line.

Both the text cursor or bounding box methods can be used with line spacing. Adjusting the line spacing in the text cursor mode will affect the spacing between the current line and the line above. In the bounding box mode, the line spacing will change the spacing of the enclosed text lines.

When the Line Spacing command is activated, a dialog box appears. The user can enter the desired value. The numeric range for line spacing is -64 to 64, with 12 the default. This number if changed will carry forward for any new text entry. Entering a negative number will cause text lines to overlap.

Justifying Lines

Line justification settings establish accurately centered and aligned text. There are three available line justification commands in the Line menu - **Left, Center and Right**. The default setting for justifying lines is left-justification, aligning a text line to the left page margin. Center-justifying a line will align it perfectly within the horizontal center of the edit window. And right-justification will cause alignment on the right page margin.

Line justification through keyboard commands offers an efficient equivalent to the menu items. First select the line with the text cursor or the bounding box. **To left-justify the selected text from the keyboard**, press ALT - L; **to center-justify**, press ALT - C; **to right-justify the current line**, press ALT - R. The keyboard justification command also works to justify the text cursor on a blank line. Finally, a keyboard based justification toggle using the function key F5 Justify Line is available as well, which cycles through all justification modes sequentially.

Page Menu

The Page menu consists of commands affecting the current page displayed in the edit window such as cutting, copying, pasting and inserting pages, adding full screen images, activating word wrap, clearing objects and justifying text.

Cutting, Copying, Pasting, and Inserting Pages

Adding Pictures

Activating Word Wrap

Clearing Pages

Justifying Pages Horizontally

Justifying Pages Vertically

Setting Up Page Parameters

Cutting, Copying, Pasting and Inserting Pages

The commands of Cut, Copy, Paste and Inserting Page are used in conjunction with the page picon list located at the left hand side of the Alpha CG interface. Before performing any of these commands, select the desired page in the page picon list. The page now appears in the edit window. **Cut Page** will eliminate the current page; it can be used with the Paste Page command if desired. All the subsequent pages after a Cut Page command is performed will be moved upward and renumbered.

Copy Page works similarly as the Cut Page except it will not remove the current page. **Paste Page** allows the user to copy the page previously cut or copied to a new location. The user can choose the option of pasting the copied page before or after the current page displayed in the edit window. **Insert Page** will add a blank page either before or after the current page.

Adding Pictures

Alpha CG allows the user to quickly load in a picture file from an external source. It is the same function as the Add Picture function in the Graphics mode. Please see the discussion in the Graphics mode section for further explanation.

Activating Word Wrap

The **Word Wrap** command moves the text cursor to a new line automatically when a line is filled with text. The user does not need to press the ENTER key to create a new line.

Clearing Pages

There are three Clear Page commands in the Page menu - **Clear All**, **Clear Text** and **Clear Graphics**.

The Clear command will eliminate the specific type of objects selected in the menu. Clear All will clear everything, text and graphics from the current page. Clear Text will clear text only and Clear Graphics will clear all graphic objects.

Justifying Pages Horizontally

Two types of page justifications can be found in Alpha CG. The horizontal justification aligns the page either **left, center, or right**. These commands work the same way as the those in the Line menu, except they affect all text lines on the current page. Any text lines with tabs will not be adjusted by the horizontal page justification commands. **To left-justify the page from the keyboard**, press ALT -SHIFT- L; **to center-justify**, press ALT -SHIFT- C; **to right-justify the current page**, press ALT -SHIFT- R. Pressing function key F6 will cycle through the three horizontal page justification commands - left, center and right.

Justifying Pages Vertically

The text lines can be justified quickly at the bottom of the **Lower 3rd** portion of the page. This page justification is useful for captioning and sub-titling.

Setting up Page Parameters

Selecting the **Page Setup** command will recall a dialog box from which the user can establish the page type, page margins, tabs, grids, safe title area and edit window size. The default button in the Page Setup dialog box will return all values to default values if activated.

Page Type

Page Center Offsets

Page Margins

Tabs

Safe Title Area

Grids

Edit Window Size

Page Setup Options

Page Type

Still, roll and crawl are the three page type options available in Alpha CG. For user convenience, the same page type control can also be found in the project control area at the left side of the Alpha CG interface.

It is recommended that the page type be defined for a new page before entering text or creating graphics. Alpha CG establishes special working parameters for each page type.

The **still page** is the default page type. The size of a still page is fixed, and it is defined by the dimensions of the edit window size.

The **roll page** is designed so that the roll document can be easily be edited by scrolling the document within the edit window. Often times a roll page will have more text lines than what the edit window can accommodate. The Alpha CG roll page automatically extends the edit window downward for more text entry if necessary.

The **crawl page** works in the same manner as the roll page, allowing for dynamic page length in a horizontal direction. When the crawl page is played back, text will be scrolled in the right to left direction as if it was a single extended line of text.

Page Center Offsets

The **Vertical and Horizontal Center Offsets** are for defining a new center position of a page. In a typical page, the horizontal center is the half way point between the left and the right edges, and the vertical center is half way between the top and the bottom of the page. For certain video hardware, the page display may be shifted to the right or the left, or to the top or the bottom. This causes an exported Alpha CG page to display off center when viewed on the video output monitor.

To compensate the hardware display shift, the center point of the Alpha CG page can be offset a given number of pixels in X or Y axes as defined by the user. Any changes made to the page center offset option will automatically affect the safe title area, page margins and tabs to compensate for the shift. Using this option, text alignment and safe title area will appear shifted in the edit window, but will appear center when displayed on the video output monitor.

By default, the vertical and horizontal page center offset is 0, with input ranges from -99 to 99 pixels. A negative number represents the shifting of the screen center to the left or to the top based on the amount of pixels inputted.

Page Margins

The next command in the File menu is for setting **page margins**, the physical borders around the edges of Alpha CG text pages. It is used mostly for normal text entry operation using the text cursor. However, the margins can be overridden if the bounding box is utilized for repositioning text. Page margin settings should ideally be established before entering text on a page. Changes made to the page margins are

carried forward and they are retained for any new pages created afterward.

The four Page Margin commands adjust the **top**, **bottom**, **left** and **right** margins respectively. The numerical settings for margins refer to the absolute screen coordinates in pixels across and scanlines down the page. The default margin settings are determined by the edit window size.

Tabs

The user can define up to 8 tabs for each Alpha CG page. The tabs, like page margins, once changed are carried forward to subsequent new pages. The default **tab** settings, refer to absolute horizontal pixel values, and are evenly spaced between the left and right page margins. Once the tabs are set, pressing the TAB key in the text edit mode will bring the text cursor to the established first tab position. Pressing TAB again will advance the text cursor to the next tab position.

Safe Title Area

The safe title area indicator is displayed in the edit window as a rectangular outline. The **safe title area** is the center region of the page in which text and graphic elements can be placed and be completely visible regardless of the monitor or television that displays them. The safe title area, therefore, is useful for designing title screens for video output as consumer TV sets vary widely in the degree of the visible overscan area that they can display.

Unlike the physical boundary of the page margins to restrict text entry within a defined area, the safe title area is a passive reminder for placing text and graphics in the edit window. The safe title area is defined by a percentage of the edit window size. The numeric range for safe title area is 60% to 100%, with 80% the default. By default the safe title area indicator is always displayed. If desired, the user can deactivate the option by deselecting the **Show Safe Title Indicator** to hide the indicator.

Grids

The **Grid** function is used for aligning objects to specific points on the X and Y axes. The user can activate the grid options by selecting the desired **Vertical** or **Horizontal** options. The **Spacing** column under both options defines the space between each point along the X and Y axes. The **Offset** column defines relative position of the grid from the left and top edges of the edit window.

The **Show Grids** option, when activated, displays the grid lines in the edit window. The **Snap to Grid** option, if selected, restricts the placement of the selected object in the bounding box to the closest grid point based on the lower left corner of the object. When using the ENTER key to create a new text line with the Snap to Grid option activated, the text cursor will advance downward to the next lower grid point in the edit window.

Edit Window Size

The **edit window size** defines the output resolution of a page. If Alpha CG has direct support for the installed video hardware, it automatically detects the output resolution and places the values in the edit window size number boxes. If Alpha CG is used as a stand-alone title graphics generator, the default values of the edit window size will be set to 640x480 for NTSC and 720x576 for PAL. The maximum

supported edit window size is 768 x 576.

The values in the Edit Window Size are used to calculate the default settings for page margins and safe title area. A change in the edit window size is only advisable when the user wishes to export title pages and use them in hardware with different video output display dimension. Otherwise the edit window size should be left intact.

Video Menu

The commands in the Video Menu are related to selecting video input sources and other display options for previewing purposes. The Video Setup command in this menu is hardware specific and it may not be available unless the hardware is directly supported by Alpha CG.

Selecting Video Setup Parameters

Video Defringe Option

Anti-Flicker Filter

Selecting Video Setup Parameters

When the Video Setup command is activated, a dialog box will appear in which the user can choose a video overlay source and a video preview update option.

Video Overlay Source

The **Video Overlay Source** defines the location of the video input for overlaying text and graphics when the current page is previewed on an external video output monitor. The Black input or program option selects a solid black preview background. The other options select the available video input sources which may vary depending on the system used.

Video Preview Update

The **Video Preview Update** option permits the user to establish how frequently the page preview is updated on the preview monitor. The **Auto** option updates the current page two seconds after the last change is made in the edit window. **Manual** option lets the user manually update the preview screen by using the Preview button at the upper left corner of the Alpha CG interface or by pressing function key F9. The **Real Time** option renders the current page to the preview output whenever any change is made to the page.

Video Defringe Option

The video defringe option in the Video pull down menu is especially important when exporting 32-bit key pages to be viewed over video.

In a key page, the defringe function removes the fine black rim around the edges of light colored text and graphics that do not have black edge attributes. When the defringed key page is subsequently viewed over live video, the key edges of text and graphics will retain the highest level of anti-aliasing.

However, if the defringed page is viewed using typical RGB graphics programs, the edges of some objects may appear jagged depending on the color of the edge attributes assigned in Alpha CG. These programs are only displaying the 24-bit image and are not applying the 8-bit alpha channel which would remove the jagged edge aliasing.

Alpha CG will not apply video defringe processing to any pages exported in a 24-bit file format. However, if a key page is exported in a 32-bit file format, by default video defringe processing will be applied. The user can turn the video defringe processing off by deselect the Video Defringe option in the Video menu.

Anti-Flicker Filter

The Anti-Flicker Filter option performs an extra image processing function on the page when it is exported or previewed over video to remove flickering on the video output. This flickering can occur around the brightest or highlighted areas of text or graphics. This function can appear to slightly soften the image in some cases. By default the anti-flicker filter is off.

Help Menu

The Help menu contains information about the version number of the software, as well as this online help file.

Pull-Down Menus

Page Controls

Tab Menu Attribute Controls

Toolbar

Text and Graphics Presets

Edit Window

Text and Graphics Modes

Palette Banks

