

















































Glossary

To learn the definitions of terms used in this help, click on the appropriate button.

-  **ADPCM**
-  **Aliasing**
-  **Alpha Channel**
-  **Anti-aliasing**
-  **Aspect Ratio**
-  **Averaging**
-  **Bit**
-  **Bitmap**
-  **Black and White**
-  **Brightness**
-  **Channel**
-  **Chrominance**
-  **Client program**
-  **Clip**
-  **Cloning**
-  **CMYK**
-  **Color Model**
-  **Complementary Color**
-  **Compression**
-  **Contrast**
-  **Control Line**
-  **Control Point**
-  **Crop**
-  **Data Transfer Rate**
-  **Data Type**
-  **Dithering**
-  **Dots per Inch (DPI)**
-  **Edit Decision List (EDL)**
-  **Embed**
-  **Export**
-  **File Format**
-  **Filters**
-  **Frame**
-  **Frame Rate**
-  **Frame Size**
-  **Graphics File**
-  **Grayscale**
-  **Halftoning**
-  **HiColor**
-  **HSB**
-  **Hue**
-  **Image**
-  **Import**
-  **Indexed-Color**
-  **Interleave**
-  **Key Color**
-  **Key Frame Rate**
-  **Link**

- ↕ Luminance
 - ↕ Mark In / Mark Out
 - ↕ Marquee
 - ↕ Mask
 - ↕ Matte
 - ↕ MCI
 - ↕ MIDI
 - ↕ NTSC
 - ↕ Object
 - ↕ Object Pool
 - ↕ OLE
 - ↕ PAL
 - ↕ Pixel
 - ↕ Prime Colors
 - ↕ Proxy File
 - ↕ Raster
 - ↕ Resolution
 - ↕ RGB
 - ↕ Saturation
 - ↕ Selection Marquee
 - ↕ Server
 - ↕ Thumbnail
 - ↕ Time Code
 - ↕ Transformation
 - ↕ True Color
 - ↕ VGA
 - ↕ VISCA
 - ↕ Warping
-

Using Help

Select a topic from the contents page, or use the Search button below the menu bar to look for information. To get information from within the program, select a command or position your mouse on a feature and press the **F1** key.

The following buttons are used in this Help:



Menu button displays all the menus



Definition button provides background information



Topic button displays associated topics and procedures















Mid-topic button jumps to another location in the same topic. Click on the Back button to return to the top



Dialog box button provides information about a dialog box






Browse

-  **File Name** defines the filename you wish to search for
 -  **Files found** after scanning, shows all the files on the current path matching the entry in the filename text box
 -  **Directories** shows the current path and any subdirectories under that path
 -  **Drives** lists all the available drives
 -  **Size** shows the disk space occupied by a file selected in the files found list box
 -  **Date** shows when the file selected in the files found list box was last saved
 -  **Sort Files By** defines the order in which the found files are displayed
 -  **OK** returns you to the dialog box from which you accessed this dialog box
 -  **Scan** starts searching for files matching the specified name on the selected path
 -  **Delete** deletes the selected file
 -  **Rename** opens the Rename dialog box in which you can change the filename
 -  **Network** allows you to connect to a network (only available if you are running Windows for Workgroups)
-

Memory

- ▣ 1. shows your current TEMP directory defined in your AUTOEXEC.BAT file. If you do not have a TEMP variable defined, then the Windows predefined directory appears
 - ▣ 2. 3. 4. allow you to enter additional drives and directories which will provide extra working space (normally different drives unless your access rights to particular directories allow you different space allocations on the same drive)
-

File Formats

-  **Active File Formats** lists all the file formats currently available
 -  **Add** adds a selected file format from the Inactive File Formats list box into the Active File Formats list box
 -  **Remove** removes a selected file format from the Active File Formats list box and place it in the Inactive File Formats list box
 -  **Remove All** removes all the file formats from the Active File Formats list box and places them in the Inactive File Formats list box
 -  **Inactive File Formats** lists all the file formats removed from the Active File Formats list box
-

Insert Thumbnails into Album



Album allows you to select an available album to insert thumbnails into



Subject allows you to enter a subject for the thumbnail (up to 127 characters)



Description enables you to assign a description to the thumbnail



New opens the New Album dialog box; use this dialog box to create new albums

New Album

- ▾ **Title** allows you to define the title of the album (up to 23 characters)
- ▾ **Size** defines the size of thumbnails the new album will contain
- ▾ **Compression** lists the available compression methods
- ▾ **Display Thumbnails in Grayscale** displays thumbnails in the album as gray images on a 16-Color display
- ▾ **Create Album File in Directory** allows you to define the directory in which the new album is created
- ▾ **Description** allows you to enter a description for the new album (up to 511 characters)

Related topic

- ▾ [Insert Thumbnails into Album dialog box](#)

Print

- ▾ **Printer** shows the currently selected printer (selected in the Printer Setup dialog box)
 - ▾ **Title** allows you to enter text that will appear above printed images (the default "&f" prints the image's filename)
 - ▾ **Copies** allows you to enter the number of copies to print
 - ▾ **Scale to Fit the Page** scales images to print as large as possible on the output page
 - ▾ **Center the Image Horizontally and Vertically** allow you to choose where the image prints on the output page
 - ▾ **Start From Top Left Corner** determines the exact positioning of an image on the output page
-

Eleven sizes are available from 32x32 to 192x192. The files of albums with larger thumbnails will be slightly larger on disk but give you better representation of images and graphics. Application-linked files' icons are always 32x32, so for these, the smallest size allows you to display more thumbnails at one time without reducing the visual impact of each.

You can choose No Compression, JPEG Compression or lossless compression. Files compressed with a lossless scheme are restored to their original state. JPEG compression discards some of the original data during the compression process.

This option is only available when you are using a 16-Color display and you have selected *Bypass VGA palette to enable use of 16 grays* in the VGA Palette dialog box.

Use this to limit the file search to a specific file, file name, or file extension. Enter "*" to list all files in the current path.

Filenames, with full paths, are listed in the order they are found. To change the order use the Sort Files By options.

The selected directory and all subdirectories below it are searched. Press the Esc key to abort scanning.

Files are originally displayed in the order they are found. You can sort by Name, Type, Size, and Date/Time. Sorted files can appear in ascending or descending order. Select an option and the files are sorted automatically.

If you have found and selected a file from the files found list box, its path and filename (or just path) appear in the Filename text box of the original dialog box.

File Formats

Files are categorized into eight media types: Image, Graphics, Waveform, MIDI, Video, Animation, Application-linked and Others. From these groups, Ulead programs can only directly edit, read and write files in the Video, Animation, Waveform, Image and Graphics groups. It can directly catalog and manage files in the other groups and, when you wish to edit them, transfer them to compatible programs for you.



Application-linked files



Waveform files



Animation files



Video files











Graphics files



Image files

Image files



Ulead programs support a wide range of images files which in most cases can be read and then edited using FIO plug-in files in the ULEAD2 subdirectory. The following section describes each of these image formats and provides examples of when to use one over another. For more information, click on the appropriate file format.

-  **Adobe PhotoShop (PSD)**
-  **Encapsulated PostScript (EPS)**
-  **Graphics Interchange Format (GIF)**
-  **JPEG file interchange format (JPG)**
-  **Kodak Photo CD (PCD)**
-  **MacPaint (MAC)**
-  **PC Paintbrush (PCX)**
-  **Quick Draw Picture (PCT)**
-  **Tagged Image file format (TIFF)**
-  **Targa (TGA)**
-  **Windows Bitmap (BMP)**
-  **Windows Metafile (WMF)**
-  **Windows Paint (MSP)**

Note: When you save images to some of the above formats you are given options.

Graphics files

Ulead programs support a wide range of graphics files which in most cases can be read and then edited using FIO plug-in files in the ULEAD2 subdirectory. The following describes each of the graphics formats supported. For more information, click on the appropriate file format.

-  **Quick Draw Picture (PCT)**
 -  **Lotus Picture (PIC)**
 -  **Windows Metafile (WMF)**
-

Waveform files

Waveform files contain audio information. With proper hardware and drivers, you can use your computer to play them. Ulead programs support two types of waveform files: WAV and VOC. Using Audio Editor, you can record, play, and edit waveform files. Album uses Windows Media Player to play .WAV files from albums.

Video files

Currently there are two video file formats in Windows that are unrivaled for popularity: AVI and MOV. The Morph Editor and Album programs allow you to play AVI videos using Windows Media Player. Video Editor and Video Capture can both play AVI files while Video Editor can also edit video files and convert Apple QuickTime movie files (MOV) to the AVI format.

Animation files

The FLC, FLI, and FLX animation file formats were developed by Autodesk to create motion from still image and graphic files. Ulead programs use Windows Media Player to play animation files. Morph Editor and Video Editor can import animation files and convert them to AVI format for editing.

Application-linked files

Application-linked files are files that Ulead programs do not directly support but are linked to a Windows program in the Windows "registration database". This database is maintained by Windows and records the link between files and their programs. Application-linked files can be opened in their linked program directly from Album or Windows File Manager by double-clicking on the file's thumbnail or filename.

Links to the registration database can be created three ways:

- ☐ by the program themselves. When installed, programs record their proprietary formats and any formats they "expect" to open. Windows Write, for example, records Write (.WRI) files as one type of file that will open in it.
 - ☐ the Associate command in the File menu of Album or File Manager. This command opens a dialog box in which you can see the program a format is linked to by typing the extension in the Files with extension text box. You can also change the association of files (see your File Manager's Help topic: *Associate Files with Applications*). This command is the method Microsoft recommends for editing the database.
 - ☐ the [Extensions] section in your WIN.INI file. You can manually edit this section and add new entries. The Associate command is a more interactive method of editing this data.
-

Image Data Types

In the same way that you can have color and monochrome displays, you can have different types of images. All Ulead graphics programs support five image data types (Album and Screen Capture support HiColor as well). The data type of an image determines the colors the image may contain and, in any description of image data types, you will see mention of "bits". The number of bits controls the exact number of colors available. You can work out this number by raising two to the power of the number of bits, e.g. an 8-bit data type gives a possible 256 colors.



Black & White



Grayscale



Indexed 16 and 256-Color



RGB True Color

Other data types



RGB HiColor



RGB 8-Color

Black & White is a one-bit data type. In a Black & White image, each pixel can be only white or black. Shades of gray can be simulated by arranging black and white pixels in such a way that they appear to be gray.

For example, a square of 4 pixels by 4 pixels (16 in all) can appear to be gray (a 50% tint of black) if eight black pixels and eight white pixels are properly arranged. Changing the mix of black and white pixels can darken or lighten the shade of gray the eye perceives.

Grayscale is a 256-Color (8-bit) data type. Each pixel in a Grayscale image can be black, white, or any one of 254 different shades of gray.

Choose this data type when you want to prepare images for a publication printed in a single color. If you want to introduce color into an image, convert it to RGB True Color.

Indexed-color images are images which have a "color table" incorporated into their description. This color table contains all the colors that can appear in the image. For Indexed 16-Color images, the color table has 16 colors (4-bit); for Indexed 256-Color images, the color table contains 256 colors (8-bit).

Most functions can be applied to indexed-color images, but to get full benefit from the more advanced editing features, convert indexed-color images to RGB True Color.

The initials RGB stand for Red, Green, and Blue. The data type bears this name because all available colors are created with different amounts of red, green and blue. In fact there are 256 shades of each available and mixing them together can result to any of 16.7 million possible colors. Hence the term True Color.

This data type has been introduced in conjunction with the influx of 15 and 16-bit display cards (32,768 and 65,536 colors). RGB HiColor display cards provide a lower-cost alternative to True Color cards for high quality color representation. You may want to use this data type if you are capturing images from a HiColor display. If 64,000 colors are enough for your needs, you can save images in this data type to save space on your hard drive. An RGB HiColor image occupies 33% less memory space than an RGB True Color image.

Note: *To save images in this data type, you must use Screen Capture or Album and save them in the TGA format. The other formats do not support a 16-bit data structure. Image Editor does not support conversion to this data type and automatically converts RGB HiColor images to RGB True Color when they are opened.*

This is an old image data type that you can open but not save. When opened, RGB 8-Color images are automatically converted to Indexed 16-Color.

This is a file format that allows Windows to display an image consistently on different devices (with similar capabilities). It supports Black & White, Indexed 16- and 256-Color, HiColor (565 and 555) and True Color images. You may want to use this format to save indexed-color images for later use in applications like Windows Paintbrush or in Windows itself (as, for example, your "Wallpaper"). Ulead programs can both read and write to this format.

Note: *Ulead programs convert 32-bit True Color images to 24-bit True Color when reading.*

This is a device-independent file format used in Adobe PostScript language that retains information that can be outputted directly to a printer, or imported into another application. A low resolution TIFF preview enables you to view the image when imported into other applications. Ulead programs allow you to read and write to this format (in raster form).

Ulead programs cannot recognize EPS files that contain information other than in an image format.

Developed by CompuServe to allow device-independent transfer of images, GIF supports images up to 64 MB in size with up to 256 colors (8-bit), Black & White, Indexed 16- and 256-Colors.

GIF formats support LZW compression and is ideal for converting to and from this platform. Ulead programs support its 89A standard and can read and write to GIF format.

Note: *GIF files do not record image resolution.*

Developed by the Joint Photographic Experts Group, this file format is a new industry standard compressed file format that offers compression ratios up to 100:1 (original file: compressed file). As a standard it offers device-independence, i.e. you should be able to open any JPG file in all applications that support this format. JPG supports Grayscale, True Color and CMYK (4-2-4) True Color images. Ulead programs can read and write to this format.

JPEG differs from LZW compression in that it is a "lossy" compression scheme: it discards data during compression. To minimize the visual effect of this loss, JPEG identifies and discards information that is least important to the human eye. Use this format when disk space is at a premium, or you have very large images.

Developed by ZSoft Corporation for PC Paintbrush. This is the default format used by some scanning and painting applications (including PC Paintbrush). PCX supports Black & White, Indexed 256-Color, HiColor (24-bit), Grayscale, True color and CMYK True Color images. Ulead programs can read and write to this format.

Note: *Some versions of the PCX format do not record the resolution of an image. The version used by Ulead does. If you import an image with no resolution defined, it sets it at your current display resolution. You can redefine the resolution with the Resolution command in the Edit menu.*

Developed by TrueVision for its full-color video boards (in particular the TARGA board), this is the format used by many specialized systems. Ulead programs support Grayscale, Indexed 256-Color, Hi Color and True Color (Alpha Channel) TGA images, and can read and write to this format.

Note: Some TGA files do not record the resolution of images.

Developed by Aldus and Microsoft to promote the use of desktop scanners and DTP (desktop publishing), non-compressed TIF is hardware and software independent, but there are many types which are not.

Ulead programs can both read and write files in the TIF format. In addition to Black & White and Grayscale images. they also support Indexed 16- and 256-Color, True Color and CMYK True Color (4-2-4) TIF images with LZW, PackBits and CCITT G3 1-D compression options.

Choose this format for exchange of image data between graphic media. Applications that support TIF images include: ColorStudio, CorelDraw, PageMaker, PhotoShop, to name a few.

CGM is an official standard for graphics interchange developed by the American National Standards Institute. It uses three different standard encodings that include character, binary word and readable text.

CGM is device independent and is ideal for 2-D CAD program and drawing programs such as CorelDraw. Ulead programs can read files in the CGM format.

Graphics format used by the Micrografx Designer/Draw programs by Micrografx Corp. Ulead programs can read this format.

Developed by Autodesk Inc. for PC-based CAD applications, DXF is the standard for CAD drawing data exchange and supports 2-D vector formats including wireframes and filled planes. Ulead programs can read in the DXF format.

Applications that support DXF graphics include CorelDraw, PageMaker, Auto CAD, Cadkey, and FastCAD.

Developed by Hewlett Packard Co., for its plotters and laser printers, HGL is used in all CAD programs, as well as in word processing and charting programs. Ulead programs are only able to read this format.

Developed for its MacPaint programs by Apple Computer Inc., this bitmap file format supports most Mac-based programs including PageMaker.

This file format provides support for 1-bit black & white images (delivers Grayscale only through dithering). Images are 720 x 576 pixels. Ulead programs can both read and write to this format.

This bitmap format supports 1-bit Black & White images (delivers Grayscale only through dithering). Ulead programs can read and write files to this format.

PIC was developed by Lotus Development Corp. to save vector charts and graphs for its Lotus 1-2-3 program. Applications that support PIC format include Javelin, MS Word, WordPerfect, and many other word processing and graphics programs. Ulead programs can only read files in the PIC format.

Developed by Eastman Kodak for its Photo CD products which allows you to view photos from Photo CDs. To enable you to view these photos in different display modes, PCD files contain 5 resolutions and allow you to choose from 3 different data types; Grayscale, Indexed 256-Color, and True Color photos. Ulead programs can read files in the PCD format but cannot save to this format.

Create by Adobe Systems, Inc. for its PhotoShop package, PSD supports Black and White, Indexed 256-Color, Black & White, Indexed 256-Color, Grayscale, True Color, CMYK True Color images. Ulead programs can both read and write to PSD format.

Developed by Apple Computer Inc. for Mac applications which support both image and graphics formats; for PC word processing, desktop publishing, graphics programs; and for UNIX graphics translation applications; this format is ideal for both bitmap and vector data exchange. Ulead programs can read both PICT I and PICT II formats.

This format PCT uses a coded binary (two-part numbering combination) PackBit (two byte coded compression) system to store bitmaps and provides excellent compression for monochrome images. PCT supports 8-bit, or 256-Color images drawing upon a 48-bit RGB palette.

WMF is a device-independent format for the exchange of raster and vector graphics data. WMF supports Black & White, Indexed 16- and 256-Color and RGB True Color images.

Saving files in WMF format saves data according to the type of display you have. For example, if you save a True Color image as WMF on an indexed 256-Color display, when you open the file, you will see it as indexed 256-Color. Ulead programs can read both vector and raster formats and write to this format (in raster form).

Abbreviation for Adaptive Delta Pulse Code Modulation. It is a method of storing audio information in a digital format.

A method of smoothing out jagged edges in bitmap images. This is usually accomplished by shading the edges with similarly colored pixels to the background, thus making the transition less apparent. Another method of anti-aliasing involves using higher resolution output devices.

The ratio of width to height in an image or graphic. Keeping the aspect ratio means any change to one value is immediately reflected in the other.

A filtering process which takes the gray/color value of each pixel and averages it with the values of surrounding pixels. The value of each pixel is then replaced with the averaged value.

The smallest element of a computer's memory. Among other things, bits are used to record the color values of pixels in an image. The more bits used for each pixel, the greater the number of available colors. For example:



1-bit: each pixel is either black or white.



4-bit: each pixel can be any one of 16 colors or gray shades.



8-bit: each pixel can be any one of 256 colors or gray shades.



16-bit: each pixel can be any one of 65,536 colors.



24-bit: each pixel can be any one of 16.7 million colors.

The measurement of the speed at which information passes between storage mediums, (ex. CD ROM or Hard Disk), and the display device, (ex. Monitor or MCI device). Depending on the devices used, some transfer rates may offer better performance than others. For example, most double-speed CD-ROMs have 300 KB/sec transfer rates.

An image format made up of a collection of dots or "pixels" arranged in rows.

An image that contains only black and white pixels.

A description of how much light appears to be reflected from an image. The two extremes of brightness are white and black. White reflects all light and represents maximum brightness. Black, on the other hand, absorbs all light and represents zero brightness.

Classifications of information in a data file to isolate a particular aspect of the entire file. For example, color images use different channels to classify the color components in the image. Stereo audio files use channels to identify the sounds intended for the left and right speakers. Video files use combinations of the channels used for image and audio files.

Used in an HSB color model, chrominance consists of both the hue and saturation portions of a color.

An application which accepts linked or embedded object files.

A file, portion of a file, or other data placed in a video timeline for editing.

A temporary storage area shared by all Windows programs used to hold data during cut, copy, and paste operations. Any new data you place onto the clipboard immediately replaces the existing data.

Replicating one part of an image within or between different images.

A color model in which each color consists of varying degrees of the colors cyan, magenta, yellow, and black. This is a popular model for printing.

A color model is a way to mathematically describe and define colors and the way they relate to each other. Each color models has a specific purpose; the two most common color models are RGB and HSB.

Complementary colors are opposite in value to primary colors. If you were to combine a color with its complement, the result would be white. For example, the complementary colors of red, green, and blue are cyan, magenta, and yellow respectively.

A method for making files smaller in size on disk. There are two types of compression: lossless and lossy. Files compressed with a lossless scheme can be restored to their original state with no change to their original data. Lossy schemes discard data during compression, so the file, when reopened is slightly different. Ulead programs support schemes of both types depending on the file format.

The difference between light and dark. In an image with high contrast, the transition from dark to light is very clear.

Points placed upon an image or effect that identify starting, ending, or intermediate locations for objects during animation.

A line that joins two control points in to establish a fixed path to follow during an animation.

The way an image is internally described and represented by a computer. The data type of an image controls the amount of information that the image can retain and therefore its displayed appearance. Ulead programs read and write the following types: Black & White, Grayscale, Indexed 16- and 256-Color, RGB True Color and CMYK True Color. RGB 8-Color images can also be read, but they are automatically converted to Indexed 16-Color.

To copy an object created in one program, (server) to another, (client). The object retains a copy of its native data and a link to its server program which may be edited directly from the client.

The process of transferring information from one program to another.

A single image in a video or animation sequence.

Frame rate defines how many frames of a video sequence are played in one second.

The ways in which a computer stores images or information on a disk.

Tools that alter data to produce special effects.

A file whose data is composed largely of vector graphics. Vector graphics do not have a basic component, like a pixel, but are defined as lines between points, and fills between lines.

A shadow effect that often occurs when performing morph operations. This problem can usually be solved by placing more control points and lines along the areas that appear to ghost.

A method of using a pattern of black and white dots to produce what appears to be shades of gray. This is a common type of dithering.

For images, this normally means a 16-bit (5-6-5) data type that can contain up to 65,536 colors. TGA file formats support images of this type. Other file formats require prior conversion of a HiColor image into True Color. For displays, HiColor normally refers to 15-bit (5-5-5) display adapters that can display up to 32,768 colors.

A color model that specifies colors in a way that is easier for people to visualize than the RGB model. H represents the hue, or basic color; S represents the saturation, or purity of the color; and B represents the Brightness, or amount of light the color appears to emit.

An image is a reproduction, or picture of something. In this case, the term is used to describe digitized pictures, consisting of pixels, which can be shown on a computer display and manipulated by image enhancement software.

Creating a reference in the document of a client program to an object in a server program. The linked object can be edited directly from within the client program. When the object changes in the server program, the changes are automatically reflected in the client program.

Used in an HSB color model, the luminance refers to the perceived brightness of a color.

A mask isolates a portion or portions of an image for editing. By using a mask, you can protect parts of an image from unwanted changes. A special kind of mask allows you to use grayscale values to control how much protection is applied to an area.

Developed by Microsoft as a means to play audio and video data. It is also used to connect a computer to an external video source such as a VCR or laser disc.

Industry standard interface that allows communication between musical synthesizers, musical instruments and computers.

The smallest unit in an image. Computer images are made up of rows of pixels, each of which can be a different color. Pixels are normally so small that you can only see an image when it is created by a collection of them.

The colors that are the basis of the RGB color model: red, green, and blue. By varying how these colors are blended on screen, it is possible to create any other color.

The resolution of an image determines the size of the individual pixels in an image, and thus the size of the whole image. Resolution is shown in pixels per inch (PPI) or dots per inch (DPI).

A color model used to define colors by specifying their red, green, and blue components. This is one of the standard color models used to specify and record colors on a computer. (See Color Model.)

Saturation defines the purity of a color. A color with a high saturation appears very intense and strong, a color with low saturation appears washed-out.

A server is a program that allows you to take information or objects from it and place them into a document in another OLE client program. Album and Image Editor can both act as server programs.

A small, low resolution representation of an image.

Commands in Ulead programs that allow for spatial effects like flip, rotate, and distort.

An image that contains enough color to appear "true" to life. For an image, this normally means 24-bit color, providing up to 16.7 million colors.

The ratio of width to height of a pixel, a selected area, or an image.

The brightness of an image is a description of how much light appears to be emitted from it. An absence of light (black) has zero brightness; pure white light has maximum brightness.

The contrast of an image is the difference between light and dark. In an image with high contrast, the transition between dark and light is very clear; in an image with low contrast, the transition is not so obvious.

Method by which images with a limited color palette appear to contain more color. Most notably, Black & White images appear to contain near-continuous changes in tone (gray shades). By arranging pixels of different colors close together, dithering can simulate colors not directly supported by an image data type. The various dithering techniques differ in the way they calculate and arrange new pixel values.

A unit of measure for screen and printer resolution that represents the number of dots a line can print or display per inch. Also called pixels per inch (ppi).

Graded shades of gray. For an image this normally means 254 different grays plus black and white: 256 "grays" in all.

Hue describes the actual color portrayed. For example, when you say a color is red, or blue, or turquoise, you are referring to hue. The HSB model measures Hue in degrees from 0° to 359° where Red is the starting point.

The Object Pool is a unique feature in Ulead programs. It allows you to easily store images or selection areas as images or masks for future use.

In computing terms, an image is a digital picture shown as a collection of dots, (pixels), arranged on a page or screen.

This stands for National Television Standard Committee. This committee defined the video standards used by the American television industry, about 30 frames per second.

Video Graphics Array: a type of display card that provides a standard resolution of 640x480 supporting 16 colors.

A protocol used by several devices for controlling external video sources from computers.

A method of distortion based on a grid pattern. By moving the control points that appear at each grid intersection, you can control the distortion of the image.

The process of bringing data from one program into another and altering its format to accommodate the new program.

A color model that assigns a unique value for each color or shade in the image.

An arrangement of audio and video to promote smoother playback and synchronization or compression.
The standard AVI format equally spaces audio and video.

A color made transparent so that a background image can show through. Most commonly used when overlaying one video sequence on top of another, allowing the underlying video to display wherever the key color appears.

A method to help in the compression of video files, which works by assigning certain frames as key frames whose video data is completely saved at the time of compression. The video data of any intervening frames between two key frames is then only partially saved. On decompression these partial frames reconstruct their data from the key frames.

Saturation defines the purity of a color. A color with high saturation appears very intense and strong; a color with low saturation appears washed-out.

Color model used by some PC Video boards. In the television industry this model is used to specify colors for PAL video signals. The Y defines the brightness of a pixel, the U and the V together define the color.

A function developed by Microsoft as a means of transferring and sharing information (objects) between programs. OLE differs from cut, copy and paste operations in that the object in the client program retains a link to the server program it originated from.

Phase Alteration Line describes the video standard used by the UK television industry. Video signals conforming to this standard produce twenty-five frames per second.

Scaling maintains the aspect ratio of the image. When this option is not selected, the image prints at the size determined by its resolution.

If neither of these is selected, images print starting from the top left corner. If both are selected, the image is centered on the page.

Position is relative to the top left corner of the output page. These options are disabled when you select the corresponding centering option or *Scale to fit the page*.

Please access this help file directly from the program

CGM Open options



Force Vector Fonts controls the way fonts are converted (this option often has no visible effect)



Ignore Background controls the way any background in the original is converted



Dot Lines defines how styled lines are converted



Default Color Table assigns the Harvard Graphics default 256-Color table to the opened image

DXF Open options



Image controls if the graphic's original colors should be retained or converted to black on white



Background controls the color of the background (paper) when converted



Text Font controls the way fonts are converted (this option often have no visible effect)



Palette specifies how many colors the original graphic contains

PIC Open options



Pen determines how elements in a PIC chart or graph are converted



Image specifies the size of the image after conversion



Default resets values to their defaults

Photo CD



Resolution allows you to select the size and resolution of the image to be read



Data Type determines the data type of the image to be read









Open options

The Options button displays the open options dialog box for images and graphics file of particular file formats. This dialog box allows you to define the way the images are opened. This button is only available for some file formats and the dialog box that appears depends on the selected file format.

- ▾ **Computer Graphics Metafile (CGM)**
 - ▾ **ASCII AutoCAD (DXF)**
 - ▾ **Kodak PhotoCD (PCD)**
 - ▾ **Lotus Picture Format (PIC)**
-

Save options

The Options button displays the save options dialog box for a chosen file format. This dialog box allows you to define the way files are saved in the chosen format. This button is only available for some file formats and the dialog box which appears depends on the selected file format.

-  **Windows Bitmap (BMP)**
 -  **Encapsulated PostScript (EPS)**
 -  **IFF File Format (IFF)**
 -  **JPEG file interchange format (JPEG)**
 -  **Photoshop File Format (PSD)**
 -  **Sun Raster (RAS)**
 -  **Targa (TGA)**
 -  **Tagged Image File (TIF)**
-

BMP Save options



Bitmap Type determines if the BMP file is saved in Windows or OS/2 format

IFF Save options



Compression gives you the choice of saving with or without RLE compression

TIFF Save options

- ▾ **Format** should be chosen based on whether the image is going to be transferred to an Apple Macintosh or to be used on IBM-compatible PC's
 - ▾ **Compression** displays the compression options available for saving images of the current data type in this format
 - ▾ **Strip Size** determines the size of the contiguous strips your images are divided into for saving
 - ▾ **Tile Size** determines the size of the squares your images are divided into for saving
 - ▾ **Use Horizontal Differentiation** allows you to further increase the amount of compression
 - ▾ **Include Preview Information** allows you to choose to include a small version of the image for display purpose
-

RAS Save options



Compression gives you the choice of saving without compression or with RLE compression



first

Byte Order determines if Most Significant Byte (MSB) or Least Significant Byte (LSB) is placed



Color Order determines the order colors are encoded: blue, red, then green (BGR), or red, green, and then blue (RGB)

TGA Save options



Compression gives you the choice of saving with or without RLE compression

JPEG Save Options



Compression Level determines how much an image is compressed



Subsampling allows you to improve the compression ratio for RGB True Color images



Save Preview saves a thumbnail preview of the image for display purpose (for example, automatically activates the Preview button in Open dialog box)

EPS Save Options



Format determines how the EPS file is saved



Include Preview Information allows you to choose to include a small version of the image for display purpose

PSD Save Options



Compression gives you the choice of saving with or without RLE compression

This option causes styled lines to be converted to thin dotted lines. If this option is not selected, styled lines are converted to thick solid lines.

Set this option correctly or else some of the colors (from 8 to 15 in the color table) will be read incorrectly.

You can choose to break your image into 256 x 32, 128 x 32, 128 x 64 or 64 x 64 squares. The bigger the size of the squares, the stronger the compression.

This option has little effect on uncompressed files, so we suggest you use the default of 8 for these. For compressed files, the larger the strip size, the greater the amount of compression possible. Some applications will not read TIFF files which are saved with large strip sizes. For these applications use 4K strip sizes.

The effect of this routine depends on the nature of your image. For some images (containing random changes in color and many stray pixels) it will have little or no effect, for others (with large areas of continuous color) it will improve the compression considerably.

This option has no direct relationship with the actual compression ratio achieved, but generally, the higher the level, the greater the amount of compression.

This option is unavailable for Grayscale images.

ASCII is the basic format that can be read by all EPS-compatible software. Binary may not be compatible with other software, but files saved in Binary format will occupy about half as much disk space as those saved in ASCII format.

An Edit Decision List is a listing of all clips, effects, and transitions in a video project. This document identifies each clip's location, the mark in and mark out times, and how it relates to other clips in the project. Its primary use is as a reference when using conventional video editing equipment for the final project.



















































A matte is an image or video that isolates regions for other images or clips to appear through.

A Proxy file is a low resolution copy of an image or video file that requires fewer system resources to work with. Thus creating and editing video projects is faster.

The time code identifies the position of a frame in a video sequence with respect to a starting point, (usually, the beginning of the clip). Its usual form is Hours:Minutes:Seconds:Frame. In a video project, there may be several different time codes. One time code refers to the overall project, while the others refer to each clip in the project.

Glossary

To learn the definitions of terms used in this help, click on the appropriate button.

-  **ADPCM**
-  **Aliasing**
-  **Alpha Channel**
-  **Anti-aliasing**
-  **Aspect Ratio**
-  **Averaging**
-  **Bit**
-  **Bitmap**
-  **Black and White**
-  **Brightness**
-  **Channel**
-  **Chrominance**
-  **Client program**
-  **Clip**
-  **Cloning**
-  **CMYK**
-  **Color Model**
-  **Complementary Color**
-  **Compression**
-  **Contrast**
-  **Control Line**
-  **Control Point**
-  **Crop**
-  **Data Transfer Rate**
-  **Data Type**
-  **Dithering**
-  **Dots per Inch (DPI)**
-  **Edit Decision List (EDL)**
-  **Embed**
-  **Export**
-  **File Format**
-  **Filters**
-  **Frame**
-  **Frame Rate**
-  **Frame Size**
-  **Graphics File**
-  **Grayscale**
-  **Halftoning**
-  **HiColor**
-  **HSB**
-  **Hue**
-  **Image**
-  **Import**
-  **Indexed-Color**
-  **Interleave**
-  **Key Color**
-  **Key Frame Rate**
-  **Link**
-  **Luminance**
-  **Mark In / Mark Out**

- ↕ Marquee
 - ↕ Mask
 - ↕ Matte
 - ↕ MCI
 - ↕ MIDI
 - ↕ NTSC
 - ↕ Object
 - ↕ Object Pool
 - ↕ OLE
 - ↕ PAL
 - ↕ Pixel
 - ↕ Prime Colors
 - ↕ Proxy File
 - ↕ Raster
 - ↕ Resolution
 - ↕ RGB
 - ↕ Saturation
 - ↕ Selection Marquee
 - ↕ Server
 - ↕ Thumbnail
 - ↕ Time Code
 - ↕ Transformation
 - ↕ True Color
 - ↕ VGA
 - ↕ VISCA
 - ↕ Warping
-

Windows Terms

To learn the definitions of terms used in this help, click on the appropriate button.



Clipboard



Control Menu Box



Combo Box



Dialog Box



Double-clicking



Dragging



Drop Down Box



Entry Box



List Box



Pointer



Scroll Bar



Spin Box



Text Box

Pressing the primary, (usually left), mouse button twice in rapid succession to select or activate a Windows item. You can adjust the required speed for double-clicking in Windows Control Panel, (usually found in the Main Program Group).

The process of moving a Windows item from one location to another using the mouse. To drag an item, click on it with the left mouse button. Then, while holding the button down, slide the mouse to the new location. Depending on the program, this may be to an empty part of a program window, another program's window, or another location in the current window.



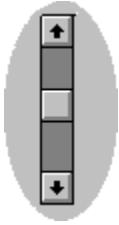
Sometimes a program offers several choices of options or selections. A drop down box provides a list of available choices. Depending on the purpose, you may be able to select one or several items from a list.



A box that appears in most dialog boxes for entering information from the keyboard. Depending on the dialog box, text or entry boxes may appear blank or with default information already filled in. In either case, you may enter your own information in them.



A special type of text box used for entering numerical settings. Up and down arrow buttons accompany the box



The scroll bar appears along the left and bottom of windows whose contents are too large to appear at one time. By dragging the scroll bar or clicking on the arrow buttons at the ends, you can change the view accordingly.



A drop down or combo box is similar to a list box except that its contents are not always visible. To view the contents of a drop down box, click on the down arrow to the right of the text box that it goes with.

A dialog box is any box that appears on the screen when a program requires user input. They contain choices for determining how the program should continue. Most dialog boxes contain OK and Cancel buttons along with all their other options. Clicking OK tells the program to accept the decisions in the dialog box and act upon them. Clicking Cancel tells the program to ignore the dialog box and return to the place you were before the dialog box opened.



The pointer shows the current position of your mouse in the workplace. Usually, it appears as a white arrow, but depending on the current task, it may appear differently. For example, when saving a file, the pointer changes to an hourglass, signifying that you should wait until the save is complete before attempting to do anything else.
















In the top left corner of every Windows window is the Control Menu Box. Clicking on this box accesses a menu with common Windows commands for controlling that window. Sometimes, other custom commands also appear in the menu too.

Glossary

Windows Terms

To learn the definitions of terms used in this help, click on the appropriate button.

-  **Clipboard**
 -  **Combo Box**
 -  **Control Menu Box**
 -  **Dialog Box**
 -  **Double-clicking**
 -  **Dragging**
 -  **Drop Down Box**
 -  **Entry Box**
 -  **List Box**
 -  **Pointer**
 -  **Scroll Bar**
 -  **Spin Box**
 -  **Text Box**
-

An object is something created by a program for use in another file of the same or different program.

The selection marquee is the animated border that surrounds selected items in Ulead programs.

An inaccurate display of an image due to the limitations of the output device. Typically, aliasing appears in the form of jagged edges along curves and angled shapes.

An 8-bit data channel used by some graphics programs or images to identify portions of images for applying filters and special effects

The maximum size for displaying image data in a video or animation sequence. If an image intended for the sequence is larger than the frame size, it must be cropped or resampled to fit.

To remove unwanted edges around an image.

In video editing, the mark in and mark out times refer to the starting and ending time codes that identify the portions of clips to be included in the project.

