

IBM/PC
CD-ROM

TEMPRA

Access

Prep, Animate, and Print Photographic Images
for Still and Multimedia Presentations!

plus™



Unbelievable Speed! 32-bit Software!

INSIDE!

TEMPRA Access Plus

CD also includes:

Quality Photo CD Images

TEMPRA PRO Primer

Background Images

NOW YOU CAN...

View, merge, and save Photo CD images! Capture video images! Animate still graphics or moving video! Print color photographic images! Enhance/correct color of images! Print tiled images for posters or wallpaper!

Requires

PC compatible, 386/SX or better, 2MB RAM, MS-DOS 3.1 or later, 12MB Hard drive recommended, CD-ROM drive, VGA display card and monitor, Microsoft mouse or 100% compatible, Optional: Windows or OS/2, Video input source.

TEMPRA™

TEMPRA

*Access plus*TM

Reference Manual

**Prep, Animate, and Print
Photographic Images for
Still and Multimedia Presentations!**

First Edition

September 1993

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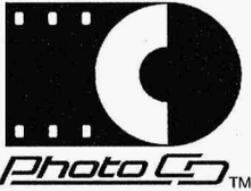
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TEMPRA

*Access plus*TM

Photo CD Software—Plus



TEMPRA Access Plus is a 32-bit protected mode software package that allows you to retrieve photographic-quality images stored on Kodak Photo CDTM discs bearing the Photo CD symbol. These images can be displayed, manipulated, printed, and exported to other software applications.

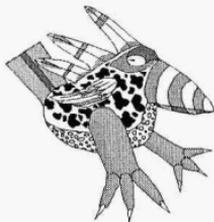
You can perform color corrections to the images you load from Photo CD or to other graphic images stored on your hard disk or a floppy disk. You can also print your images to a variety of draft and color printers.

You will find many ways in which to use the images: word processing and desktop publishing software; painting, drawing, graphics and presentation packages; database and development tools; and other applications that support bitmapped color or gray-scale images.

And with the TEMPRA Access Plus Animation Editor, you can create video or graphic animations that can be used with your Photo CD images.

You can take your negatives or film to a photofinishing service and have your own photos placed on a Photo CD. Each Photo CD holds 100 or more pictures that you can view using TEMPRA Access Plus.

System Requirements



One of the main purposes of TEMPRA Access Plus is to save images from your Photo CD onto your computer disk. These images will then be available for editing with an image editing program such as TEMPRA PRO or for a multimedia presentation using a program such as TEMPRA Media Author.

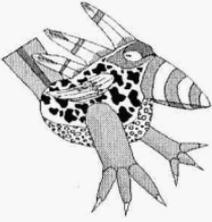
TEMPRA Access Plus requires the following.

- **An IBM PC compatible** computer with an Intel 80386 or better processor. Performance is greatly enhanced with a math co-processor or with an 80486 computer processor.
- **DOS 3.0** or higher.
- A **VGA or better** (320x200, 256-color, 32,000-color, or 16.7 million-color) display adapter. Photo CD images are considered true-color (16.7 million colors).
- **At least 640K** main memory (**520K free**).
- **2Mb extended memory** (4Mb recommended).
- **A minimum of 12Mb of available** disk space. To load a poster size Photo CD image (2048x3076), approximately **57Mb of available disk space** is required.
- A two- or three-button **mouse**.

Depending on your system configuration, you may need to add the following statement to your AUTOEXEC.BAT file.

SET SWAP =C:\TEMPRA\XMSWAP.TMP

Technical Support



For preferred tech support, join our Multimedia Player Program. Call 800-852-6284 for details.

Mathematica, Inc. provides technical support from 9 a.m. to 5 p.m. (Eastern time). We are not open on weekends or holidays. Our technical support phone number is 813-682-1130. We also have a TDD for deaf and hearing impaired customers. Mathematica, Inc. can be reached on CompuServe by typing "GO TEMPRA" or "GOMEDIAAUTHOR" or by sending mail to our CompuServe User ID #75300, 1760. You can also call Mathematica's in-house BBS at 813-683-6840.

Installing TEMPRA Access Plus

TEMPRA Access Plus includes two install options: one for Windows 3.1 users and one for DOS users.

Windows Install

1. Put the TEMPRA Access Plus CD in the CD-ROM drive.
2. Load Windows.
3. From the Program Manager, select "**Run.**"
4. Type "**D:\SETUP**" (if the CD-ROM drive is not the D: drive, substitute the appropriate drive letter).
5. Follow the instructions on the screen.

This installation automatically sets up a program group in Windows for TEMPRA Access Plus, including the customized PIF and icon.

Starting Access Plus from Windows

To launch TEMPRA Access Plus from Windows, simply select the Access Plus icon. To return to Windows, select the “X” button at the top left corner of the TEMPRA Access Plus Main Menu.

DOS Install

The DOS installation program installs TEMPRA Access Plus into the C:\TEMPRA directory. If this directory does not exist already, it is created. During the installation, you are given the option of changing the disk drive and directory.

To install TEMPRA Access Plus, follow the instructions below. Make sure your mouse driver is loaded prior to starting the installation.

1. Insert the TEMPRA Access Plus CD into your CD-ROM drive.
2. Type “**D:INSTALL**” and press [Enter]. If your CD-ROM drive is something other than drive D:, substitute the appropriate letter.
3. Follow the instructions on the screen. After the welcome screen, you choose the disk drive where you want TEMPRA Access Plus installed.
4. The default directory for TEMPRA Access Plus is \TEMPRA. The installation program asks if you want to change the name of the directory. If you want to use the default

directory, press [Enter]. If you want TEMPRA Access Plus in a directory other than \TEMPRA, use your backspace key to erase the word TEMPRA. Then type in the name of the directory you want to use and press [Enter].

5. At the end of the installation program, the TEMPRA Access Plus configuration menu appears for you to select the type of video display board you are using. If you do not see your particular display board on the list, select either Generic VGA (320x200), Super VGA (256 colors), or High Color VGA (32k colors).

Starting TEMPRA Access Plus from DOS

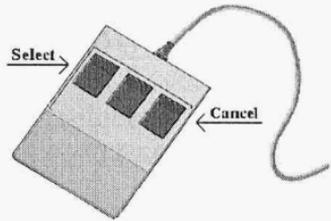
To start TEMPRA Access Plus from DOS, change to the \TEMPRA directory, type "ACSPLUS" from the DOS prompt, and press [Enter]. You must be in the \TEMPRA directory to launch TEMPRA Access Plus from DOS, unless you've created a batch file or modified your path statement to launch the program from anywhere else in DOS.

Reconfiguring TEMPRA Access Plus

DOS and Windows users can reconfigure TEMPRA Access Plus for various display boards or bit-depths. To do this, change to the \TEMPRA directory and type "ACSPLUS -R" from the DOS prompt and press [Enter]. Then select the appropriate board or bit-depth. TEMPRA Access Plus launches after you complete all the selections.

Using the Mouse

TEMPRA Access Plus works with either a two- or three-button mouse. The left button is the **Select** button. Pressing the left mouse button is the same as pressing [Alt] on the keyboard. The right mouse button is the **Cancel** button. Pressing the right mouse button is the same as pressing [Esc] on the keyboard. On a three-button mouse, the center button is not used.



The Main Menu



When you first start TEMPRA Access Plus, a Main Menu Bar appears at the top of the screen. The Main Menu Bar is the controlling point for loading, saving, and editing images from the Photo CD player, from a floppy drive, or from your computer's hard drive. Across the top of the Main Menu Bar is an Exit Button, Remove Menu Button, Clear Screen Button, Title Box, and Access Plus Information Box. Along the bottom of the Main Menu Bar are icons for the various TEMPRA Access Plus function menus.

Exit Button

The Exit Button is a large "X" in the very upper left corner of the screen. When you press **Select**

on the Exit Button, you are asked to confirm that you want to exit to DOS.

Remove Menu Button

The Remove Menu Button just to the right of the Exit Button removes the Main Menu Bar from the screen so you can see the image as it fills the entire screen. To bring the Main Menu Bar back up on the screen, press the Cancel (right) button on the mouse. Using the Remove Menu Button is the same as pressing the Cancel button on the mouse to remove the Main Menu Bar from the screen.

Clear Screen Button

The Clear Screen button is a box with a large “C” inside. The Clear Screen Button lets you clear the screen to white, giving you a clean screen to work from when viewing and editing images. When you press **Select** on the Clear Screen button, you are asked to confirm that you want to clear the screen.

Title Box

The Title Box contains the filename of the image currently on the screen, including the directory in which the image is located. You can't enter any text in the Title Box; it is for information purposes only.

Access Plus Information Box

When you select inside the Access Plus Information Box, a dialog box appears on the screen. The box contains the version date of the software, the type of display board installed, and the current screen resolution and bit-depth.

If you are interested in information on other TEMPRA products, point to the icon of Buzz the TEMPRA Toucan under the Information Box and press **Select**.

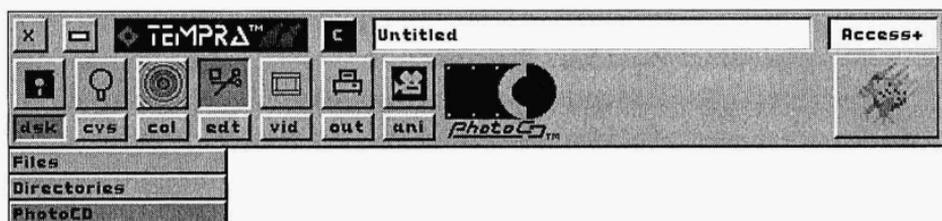
Photofinishing Information

To find a photofinishing services in your area that offers a Photo CD System, call:

1-800-242-2424, extension 36 (within the U.S.)

1-716-724-0121, extension 36 (outside the U.S.)

Disk Functions



The Disk Functions menu contains three features — Files, Directories, and Photo CD. You can load images from Photo CD, but you can't save to or erase images on the disc. But, images loaded from the Photo CD can be saved to the hard disk or to a floppy disk. You can also load, save, and erase any images from your hard disk or from a floppy disk.

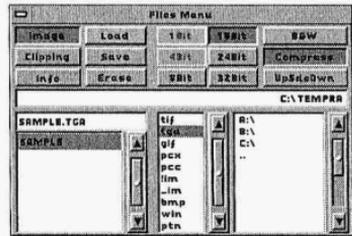
The size of an image and the number of colors determine the size of the disk files for that image. A large image produces a large file. The size of your file also increases when you increase the number of colors in it. An 8-bit (256-color) image requires one byte of disk space for

each pixel. A 16-bit (32,000-color) image requires two bytes for each pixel, and a 24-bit (16.7 million-color) image requires three bytes for each pixel.

A general formula for determining the size of image files is the height times the width times the number of bytes per pixel. Therefore, a 300x200 pixel image with 256 colors (1 byte per pixel) requires approximately 60,000 bytes of disk space. A 600x400 pixel image with 256 colors requires approximately 240,000 bytes of disk space. A 300x200 pixel image with 16.7 million colors (3 bytes per pixel) requires approximately 180,000 bytes.

Files

The Files menu allows you to load, save, and erase images to and from the hard disk. You can do the same



to clippings (portions of images). You can also view specific information for a particular file using the Info button. The buttons selected in the Files menu determine how the files are saved. You can choose from a wide range of file formats, including .HRS, .PXL, .IMG, .VST, .TIF, .TGA, .GIF, .PCX, .PCC, .!IM, .IM, .BMP, .WIN, and .PTN. Each file type has different characteristics. Buttons are inactive (gray) for unavailable options.

Loading Images and Clippings

To load an image or clipping from the hard drive or floppy drive, select the directory in

which the image or clipping is located. (If you are loading images from a Photo CD player, refer to the section in this manual headed "Photo CD.") You must also select the file format of the graphic you're trying to load. A list of files appears in the List Files Box at the lower left corner of the Files menu. You can either select the file you want to load or you can type the filename into the Filename Box directly above the List Files Box.

When the name of the file appears in the Filename Box, select the Load Button at the top of the Files menu. The Main Menu disappears and the image comes up on the screen. When you load a clipping, icons appear around it. The icons are described in the Edit section of this manual.

Saving Images

To save an image to the hard drive or to a floppy disk, go to the Files menu and select the drive, directory, file type, bit-depth, and compression you want. Type a name in the Filename Box (or select a filename from the List Files Box if you want to overwrite a current file), press the left mouse button to lock in the filename, then press the Save button on the Files menu. The menu disappears and the image is saved with the designated filename.

Saving Clippings

A clipping is a portion of an image. You can save a clipping as a rectangle or as a polygon. To save a clipping from an image loaded on the screen, go to the Files menu and select the Clipping button. Then select the drive, directory, file type, bit-depth, and compression you

want. Type the name of the clipping in the Filename Box (or select a filename from the List Files Box if you want to overwrite a current file), press the left mouse button to lock in the filename, and press the Save button on the Files menu.

The menu disappears for you to draw a rectangle or polygon around the portion of the image you want to save as a clipping. (The last active choice in the Edit menu determines whether you can save a clipping as a rectangle or a polygon.)

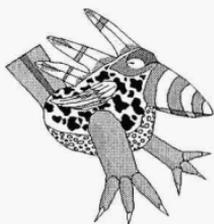
File Info

The Info button on the Files menu shows detailed information about an image file. Selecting a file and then selecting Info gives you the file type, the resolution and bit-depth, whether or not the file is compressed, the date and time of creation, and the size. It also displays a representation of the image.

Other Buttons On The Files Menu

The B&W Button allows you to save an image or a clipping as a gray-scale image. Selecting the Compress Button uses a “Run Length Encoding” or other scheme to compress the size of a file without losing any detail, thus saving disk space. TEMPRA Access Plus uses standard ways of compressing files so that other graphics programs can read the files saved with TEMPRA Access Plus. The UpSdeDwn button saves .TGA files upside down (may be necessary for other programs).

TEMPRA Access Plus allows you to save your image using any number of bit depths (the number of bits associated with each pixel). The

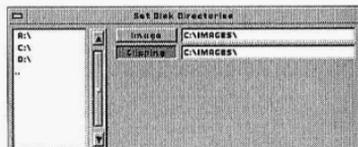


*When you have an image that contains only 256 colors (such as a *.PCX file) and save it as an image with 16.7 million colors, you do not increase the number of colors in your image. The 256 colors are stored in a space that can hold 16.7 million colors, but the image still has the original number of colors — 256.*

bit-depth available will depend on the file format selected. In other words, some file formats do not support 24-bits per pixel, while others do. TEMPRA Access Plus can save images with up to 16.7 million colors.

Directories

The Directories menu allows you to select any of the directories TEMPRA Ac-



cess Plus uses to load and save images and clippings. Use the List Box on the left of the menu to select the drive and directory. To select a directory lower on the directory tree, select it from the List Box. To move backward on the directory tree, select “..” from the List Box. Each computer’s disk drives and paths are unique. You can define a set of drives and paths to meet your specific needs.

Photo CD



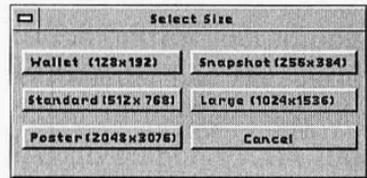
Selecting the Photo CD button from the DSK menu loads the Photo CD contact sheet. The

contact sheet displays thumbnails of all the images stored on the Photo CD. The miniature photos are displayed in the sequence in which the images are placed on the Photo CD. A Photo CD may contain 100 or more images. Use the scroll bars on the right side of the contact sheet to view photos that are not already visible on the screen.

Using the Contact Sheet to Load Images

To load a full-size image from the Photo CD, select a thumbnail photo from the contact sheet by moving the cursor to the image you want to load and pressing the Select (left) mouse button.

A Select Size menu appears with six options: Wallet, Snapshot, Standard, Large, Poster, and Cancel.



Choose the size you want or select Cancel to return to the contact sheet. When you choose a size, the menu disappears and the image loads.

Size refers to the five supported resolutions. The number of pixels used to display the photo determines its size.

The supported sizes are:

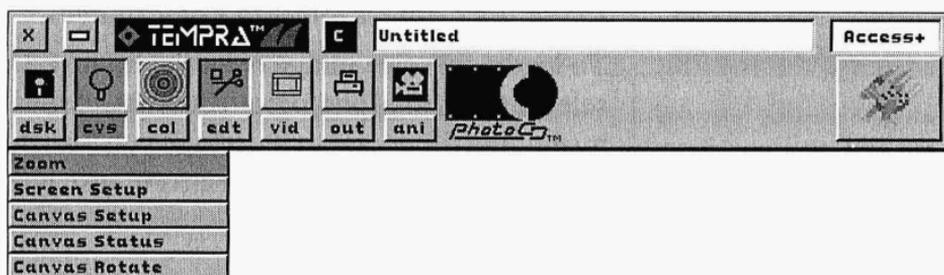
Size	Resolution	Disk Space
Wallet	128 x 192 pixels	25K - 73K
Snapshot	256 x 384 pixels	98K - 295K
Standard	512 x 768 pixels	394K - 1.2M
Large	1024 x 1536 pixels	1.6M - 4.7M
Poster	2048 x 3072 pixels	6.3M - 18.9M



When you load a poster size image, you need three times the disk space as the maximum size of the image. In other words, a poster size Photo CD image requires 3 times 18.9Mb free on your disk to load (approx. 56.7Mb).

You can use any supported resolution to view the image, perform edits, and save the image. While the image is loading, a clock appears. The clock is an approximate representation of the time remaining for the image to load. It does not indicate the exact time remaining.

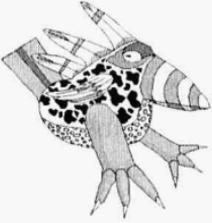
Canvas Functions



The Canvas Functions menu allows you to control the size of your image and your view of that image. The computer system and display you use determine the total environment available to you. On some monitors and image display boards, resolution may be as low as 320 x 200, while others can display up to 1024 x 768. TEMPRA Access Plus will take advantage of all the capabilities of your equipment.

TEMPRA Access Plus provides a means to edit images far larger than can be displayed on your screen. The canvas (the image itself) and the screen (that part of the image visible on your computer monitor) can be controlled separately.

When you edit an image that is larger than the screen, TEMPRA Access Plus keeps track of changes made to the image and the location of your screen display within the entire image.



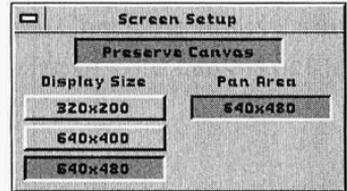
Not all monitors can support all resolutions provided by some display cards. If you choose a resolution that appears on the Screen Setup menu that is not compatible with your display, you will lose your displayed image and use of the menus. Be certain your monitor can handle the resolutions you choose with the Screen Setup menu.

Photo CD images can be larger than your screen.

The Canvas functions of TEMPRA Access Plus allow you to edit images large enough to meet all your needs.

Screen Setup

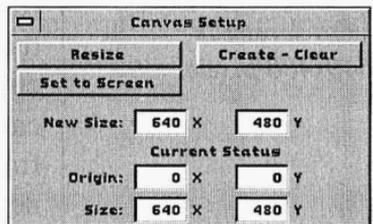
The Screen Setup menu allows you to choose the display resolution for viewing. Most displays support



more than one resolution. Use the Screen Setup menu in conjunction with the Canvas Setup menu to create the best solution for your editing needs. Some display boards, like the basic VGA, have only one choice in the Screen Setup menu. The basic VGA only displays 320 x 200 pixels with 256 colors. The Preserve Canvas button preserves your existing canvas and image when you change resolutions using the Screen Setup menu. Some displays provide a hardware Pan Area. TEMPRA Access Plus supports that ability and displays the Pan Area in the Screen Setup menu.

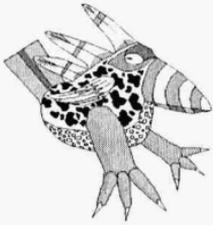
Canvas Setup

The Canvas Setup menu is used to change the resolution of a canvas or to create a canvas.



The maximum

image size you can edit in TEMPRA Access Plus is 8192 x 8192 pixels. When you use a



The Set to Screen button allows you to “crop” an image that is larger than your screen. This is a quick method to create an image that fills a super VGA screen. The super VGA screen is 640x480 pixels.

canvas that is larger than your screen can display, scroll bars appear on the right side and bottom of the display while the menus are on the screen. When you press [Esc] or the right mouse button, the menus and scroll bars disappear.

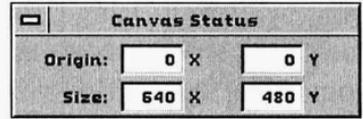
You can slide the bars to change the portion of the image that is visible on your canvas. As you move, any changes to the image on the screen are saved to disk. However, you must do an Image Save in order to save the large canvas image permanently to disk (just as you would with an image that had the same size screen and canvas).

The Set to Screen button changes your image’s canvas to screen resolution. If your image is larger than screen resolution, any parts of the image not visible on the screen are removed. If your image is smaller than screen resolution (for instance, 128 x 192), a white border appears around the image. This allows you to edit in canvas areas not previously accessible.

To change the canvas setup of your image, type the size you want the canvas to be into the “New Size” Number Boxes. The X refers to the width of the canvas (across the screen) and the Y refers to the height of the canvas (up and down the screen). Select either Resize (to resize the current image on the screen in the designated canvas size) or Create-Clear (to clear the image from the screen and create a blank canvas in the new size designated).

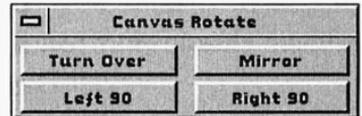
Canvas Status

The Canvas Status menu tells you the current status of your canvas. When you load an image, TEMPRA Access automatically resizes your current canvas to match. You can resize the canvas using the Canvas Setup menu. Check the status if you are not certain of the size of your canvas or the resolution you are using.



Canvas Rotate

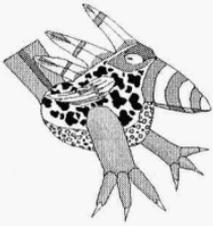
The Canvas Rotate menu allows you to change the orientation of an entire image from landscape to portrait, turn the image upside down, or produce a mirror image of the existing image. Rotation happens on the actual image file as it is stored on the disk. It is not necessary to see all of the image on the screen in order to rotate (that is, you can rotate and mirror images that are larger than screen resolution).



There are four different types of image rotation: Right 90, Left 90, Turn Over, and Mirror. An image that has been rotated can be returned to its original state by applying the complementary rotation. A rotated image cannot be “unrotated” using the Undo button.

Right 90

The Right 90 selection rotates the image on the canvas 90 degrees clockwise.



The Right 90 and Left 90 buttons take longer than the Turn Over and Mirror buttons. To create the result of two Right 90 buttons, select Mirror and then Turn Over.

Left 90

The Left 90 selection rotates the image on the canvas 90 degrees counter-clockwise.

Turn Over

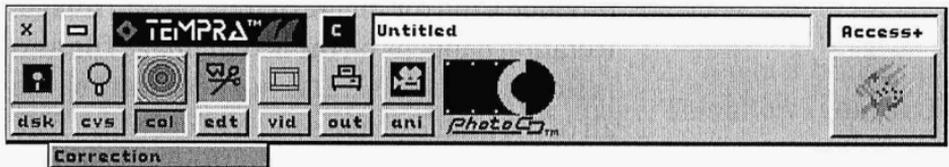
The Turn Over selection rotates the image 180 degrees (turns it upside down).

Mirror

The Mirror selection reverses the images from left to right.

Note: If you have an image that you want to print in landscape mode, rotate the canvas from the Canvas Functions menu before going into the Print Functions menu.

Color Correction Functions



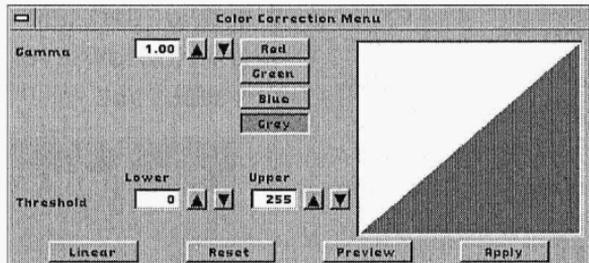
TEMPRA Access Plus can display color images in up to 16.7 million colors when configured for 24-bits per pixel. However, most color printers only use three colors — cyan, yellow, and magenta (some use black as a fourth color). Therefore, when you transfer your 16.7 million color image from computer to printer, the printer tries to duplicate all of the image's colors by combining cyan, magenta, yellow, and sometimes black.

The appearance of color is based on the reflection (or perception) of light. Computer displays emit light; an image printed on paper reflects light. Because of this difference, it is impossible to display an image on your computer display exactly the way it appears on paper.

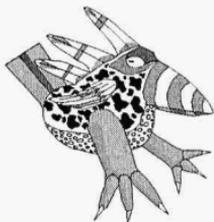
The Color Correction feature of TEMPRA Access Plus compensates for the loss of color fidelity when transferring an image from one medium to another (i.e., from computer display to paper). TEMPRA Access Plus allows you to make these corrections to the colors in your image so that when you send it to a color printer, the printed image more closely matches what you see on your display.

Press Select on the COL button to access the Color Correction menu.

Color Correction Menu



When you select Color Correction from the COL menu, the Color Correction menu appears with all adjustments set to their default values. The graph on the right side of the menu represents the attribute values assigned to each individual pixel. The Gray radio button is highlighted and the shaded portion of the graph is black.



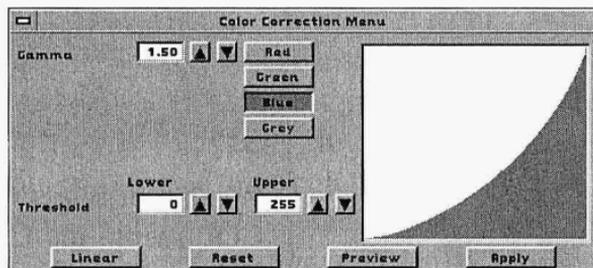
To test the results of the color controls, try each one with an image you have on your disk or Photo CD. Try each setting at its maximum and minimum settings. This shows the full range of corrections that are available. The range for color correction is from 0.10 to 4.60.

From the Color Correction menu, you can adjust the gamma for each individual color (red, green, or blue) or you can make adjustments to all colors (gray). You can also adjust the upper and/or lower threshold for each individual color or for all colors. You can reset all the values to the original default value, preview the effect your adjustments have on the image on the screen, and apply the adjustments to the entire canvas.

Gamma

To change the gamma for all color channels, press Select on the Gray button. Use the up or down arrows next to the Gamma Value Box, or press Select inside the number box and enter the new value. The range for gamma is from 0.10 minimum saturation to 4.60 maximum saturation.

When the gamma is set to a high level, the print appears dark and saturated. When the gamma is set to a low level, the image appears light and washed out.



To change the gamma for an individual color channel (red, green, or blue), select the particular color button before changing the value. When you select the red, green, or blue channel, the shaded portion of the graph on the right side of the menu changes to the corresponding color.

Changes made in the Color Correction menu can be applied to the entire canvas. The image can be saved to disk with the applied changes, so that the image has been permanently changed, which you can see the next time it's loaded.

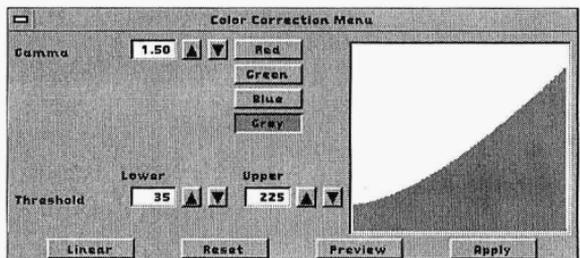
You can also adjust the gamma for all color channels from the print menu. However, this only applies gamma correction to the image being sent to the printer — it has no effect on the actual canvas or images saved to disk.

Threshold

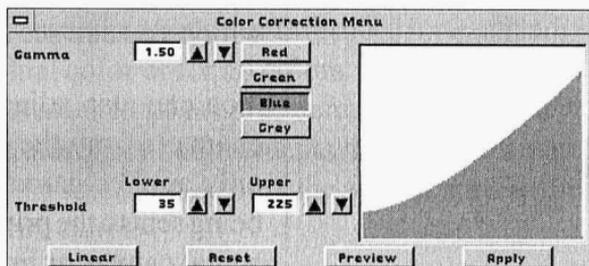
The X axis on the graph represents the pixel intensity of the loaded image. The Y axis represents the pixel intensity after color correction. Values range from 0 to 255.

TEMPRA Access Plus lets you limit the upper and lower thresholds. Decreasing the upper limit to 225 results in 225 being the highest intensity value applied to a pixel. Increasing the lower limit to 35 results in 35 being the lowest intensity value applied to a pixel.

To adjust the upper and lower thresholds for all color channels, select the Gray button and use the up down arrows next the Threshold Value Boxes to increase or decrease the value. You can also press Select inside the number box and enter the new value directly.



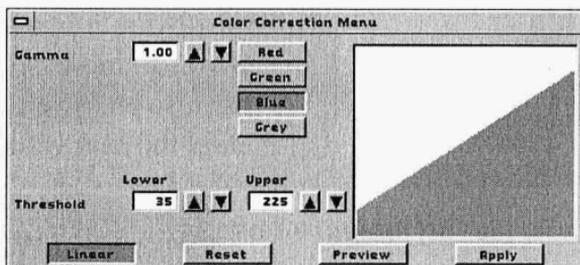
To adjust the upper and lower thresholds for an individual color channel (red, green, or blue), select the color button before changing values.



When you select red, green, or blue channel, the shaded portion of the graph on the right side of the menu changes to the corresponding color.

Linear

The Linear button compensates for adjustments to the upper and lower thresholds. After changes have been made to the threshold values, selecting the Linear button makes the graph line straight from the left side of the graph to the right side, terminating at the point specified by the value of the upper and lower threshold. Selecting Linear returns the gamma setting to its default value of 1.00.



Reset

Selecting Reset returns all settings to their original default values. The gamma value returns to 1.00 for all color channels. The lower

threshold returns to 0 for all channels and the upper threshold returns to 255 for all channels.

Preview

Preview provides a way to see the effect of your adjustments without actually changing the image on your canvas. When you select Preview, the menus disappear and changes are applied to the image on the screen. Pressing either the left or right mouse button brings the Color Correction menu back to the screen and returns the image to its previous condition.

Apply

When you select Apply, all changes made to all values are applied to the entire canvas. Once you select Apply, you cannot undo the changes that have been made unless you change the values from the Color Correction menu and select Apply again.

Edit Functions



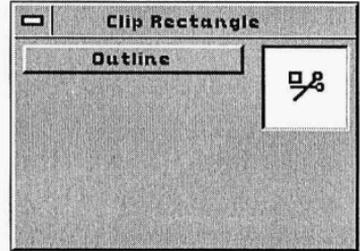
The Edit Functions menu allows you to cut out a part of the canvas and manipulate it. There are two selections from the Edit Functions menu: Clip Rectangle and Clip Polygon.

TEMPRA Access Plus remembers your choice of Clip Rectangle or Clip Polygon. Your choice of rectangle or polygon from the Edit menu

determines the type of clipping you save from the Disk Files menu.

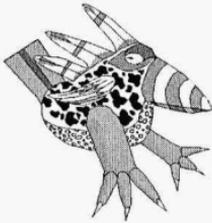
Clip Rectangle

The Clip Rectangle menu allows you to cut a rectangle from the canvas and paste it down on another part of the canvas. When



you cut an item out of the image, icons appear around it. The icons allow you to move, stretch, shrink, expand, rotate, and flip the clipping. Another icon lets you paint the clipping onto the canvas and there is an icon that makes the black areas transparent. A description of each of the clipping icons appears later in this section.

When you select an area to be clipped, TEMPRA Access Plus makes a copy of the area and leaves the original part of the canvas behind. The Outline button allows you to move only an outline of the clip and does not show the pixels that are in the clip until it is pasted down.



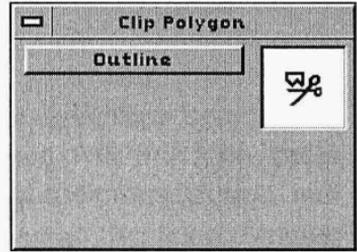
When you use a clipping and paste it down, you are always pasting a 24-bit (16.7-million color) clipping — even if your display shows only 256 colors.

To cut and paste a rectangle clipping in an image, select the Clip Rectangle menu. Press Cancel (the right mouse button) and the Main Menu Bar disappears. Press Select at the first corner of the rectangular area you want and release the mouse button. Move the mouse (don't hold down any of the mouse buttons or you won't see anything) and a rectangular shape appears over the area you want to cut and paste. Press Select again to lock in the clip area. An outlined rectangle appears on the screen

with a series of icons around it. Move, rotate, stretch, or flip the clipped area and paste it down where you want it. See the description of clip icons for more information about how to use them.

Clip Polygon

The Clip Polygon menu allows you to cut out a polygon from the screen and paste it down on another part of the canvas. When you cut an item out of the image, icons appear around it, which function the same as they do in the Clip Rectangle menu.



To cut and paste a polygon clipping in an image, select the Clip Polygon menu. Press Cancel (the right mouse button) and the Main Menu Bar disappears. Select the first corner of the polygonal area you want to cut and paste and let go of the mouse button. Move the mouse (don't hold down any of the mouse buttons or you won't see anything) along a line on the edge of a polygonal shape over the area you want to cut and paste. Press Select (the left mouse button) to lock in each line of the polygon in the clip area.

When you've completely outlined your area, press Cancel (the right mouse button). An outlined polygon appears on the screen with a series of icons around it. Move, rotate, stretch, or flip the clipped area and paste it down where you want it. See the description of clip icons for more information about how to use them.

Icons for Rectangle and Polygon Clip

-  The Paste icon pastes the clipped area on the screen. Position the cursor on the icon and press Select. If you want to move, stretch, or otherwise reposition the clipping on the screen, do so before pasting it down. Remember that after you move, stretch, or otherwise reposition a clipping on the screen, you must paste it down before it becomes a permanent part of the image.

-  The Proportional Stretch icon is used to increase or decrease the size of images proportionally. Position the cursor over this icon, press Select, let go of the mouse button, and move the mouse to the desired image size. Press Select again to save the resized image.

-  The Move icon allows you to “pick the clipped area up” and move it to another area of the screen. Position the cursor above the icon, press Select, and hold the left mouse button as you move the clipping to its new location. Release the left mouse button. Be sure to press the Paste button after you move the clipping to where you want it.

-  The arrow with the hooked tail is the Rotate icon. Your clip can be rotated at any angle from 1 to 360 degrees. Position the cursor on the icon and press Select. Now as you turn your mouse, you see the clip turn on your screen. When you have rotated the clip to the desired position, press Select again.



The Up-Down icon flips the clipped area from top to bottom. Position the cursor on the icon and press Select to flip the clip.



The Left-Right icon flips the clipping left to right. Position the cursor on the icon and press Select to flip the clip.



The Non-proportional Stretch icon stretches images nonproportionally. Position the cursor over this icon, press Select, let go of the mouse button, and move the mouse to the desired image size. Press Select again to save the resized image.

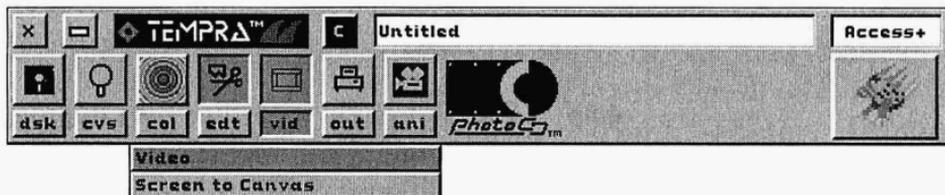


The Transparency icons determine if black is transparent. (When Transparency is active, any part of the clipping with zero (0) black becomes invisible.) A diamond with a circle in it shows when the transparency is active. A filled diamond shows when the transparency is inactive. Position the cursor on the icon and press Select to turn transparency on and off.



The Paintbrush icon in the middle of your clip paints the clipped area on the canvas. You can move the clipped area and paint continuously at the same time by holding down the left button on the mouse while moving. This creates an interesting “smear” effect with the clipped portion of the image.

Video Functions

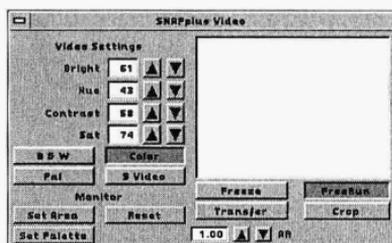


The Video functions let you bring images into TEMPRA Access Plus for editing. This feature supports the Cardinal SNAPplus and Video Blaster display boards. The SNAPplus accepts a television signal from a standard NTSC, S-VHS (American standard video signals), or PAL (European video signal) source, such as a video camera or VCR. The Video Blaster only accepts an NTSC signal.

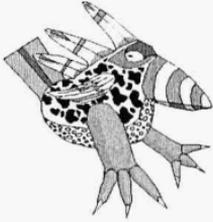
With these video boards, you can capture video and place it on your canvas as part of another image (mixing “art” and “photography”) or as its own image. The video window shows what the video source is sending into your computer. You can transfer the image in the video window to the canvas on your screen.

Video Settings

The Video Settings buttons let you adjust the brightness, hue, contrast, and saturation of the image in the video window.



Press Select in the number box and enter the new value or use the up and down arrows. When Freeze is active, these settings can't be changed.



Television cannot have more than 480 lines from the top of the screen to the bottom. If you are using a display mode that has more lines (800x600 or 1024x768), you will not gain more detail. Commercial television is defined in the NTSC standard and does not allow for more than 480 lines. In Europe and other parts of the world that use the PAL standard, the limit is 525 lines.

B&W

B&W transfers video into the computer as a black-and-white image.

Color

Color transfers captured video into the computer as a color image.

Reverse

Reverse changes the reading of the interlace from the video source.

S Video

S Video allows you to capture video using a video source (as opposed to composite video).

Set Area

Set Area sets the area on the screen to receive the image to be transferred to. Set the area by drawing a rectangle over a specific area on the screen.

Reset

The Reset button resets the Crop and Set Area to full screen.

Set Palette

Set Palette adjusts the image to the optimum 256-color palette — active in 8-bit mode only.

Screen To Canvas

The Screen to Canvas selection from the VID menu allows you to make your video window part of the TEMPRA Access Plus canvas. By making the video window part of the canvas, you can apply Color Correction from the COL menu to any frame(s) of video you captured.

Freeze

Freeze stops the frame of video from moving in the display window. When you select Freeze, the Video Settings cannot be changed.

FreeRun

When FreeRun is active, video appears “alive” in the display window and you can adjust the Video Settings.

NOTE: If you are using the MovieMaker or VCR feature from the Animation Editor, FreeRun must be active in the video menu.

Transfer

Transfer captures a frame of video and sends it to the video canvas in the area you have set.

Crop

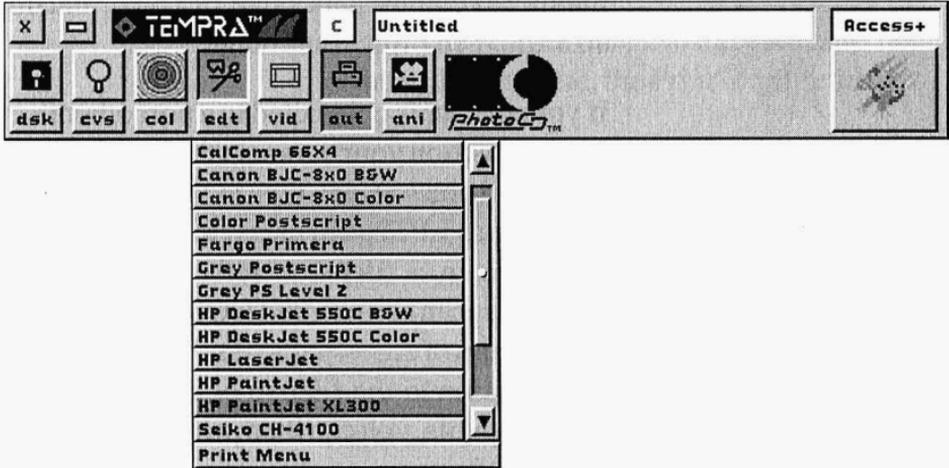
Crop lets you determine the portion of the video window to be captured.

One thing to keep in mind when using the Crop and Set Area buttons in Video is that Crop determines the portion of the video to be captured, while Set Area determines the video’s placement on the canvas.

AR (Aspect Ratio)

Aspect Ratio stretches images in the X or Y direction. To change the aspect ratio to 1.2:1, enter 1.2 in the AR fine tuning box (normal television images use an aspect ratio of 1.2:1).

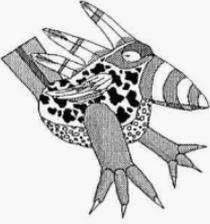
Output Functions



The Output functions menu includes selections for color printers and provides an alphabetical list of printers available directly from the drop-down menu. If your printer is not visible, select the scroll bar at the right of the drop-down menu to reveal more printers. When you see your printer on the list, point to it with the cursor and press Select. Selecting the printer name activates that printer.

Print Menu

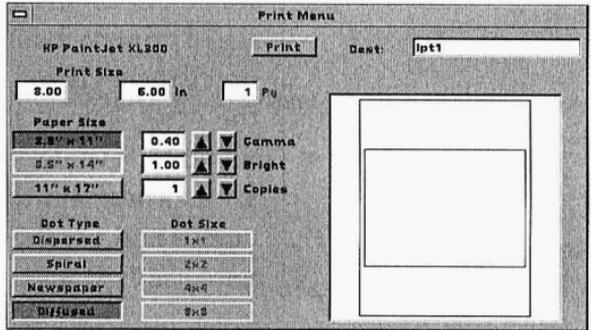
The Print Menu controls your print's appearance, size, and placement on paper. The name of the selected printer is shown. You can select a port for printing if your computer uses a printer port other than LPT1. You can also send the output to a file. A preview box shows the size and placement of the print on paper. There is one outline representing the page, while another outline inside of the first one represents the image.



Printing can take a great deal of time and for some printers, the supplies like paper and ink can be expensive. While you are testing your printer and your settings to produce the best print, use a small print size and when possible, reuse paper by printing on different portions of the page. This will speed up the process and save money.

TEMPRA Access Plus prints the image in the canvas. Adjust the size, gamma, brightness, number of copies, paper size, dot type, and dot size and then print your image.

If your printer is connected to a port other than LPT1, position your cursor in the box that says LPT1 and press Select, type in the new destination such as LPT2, and press [Enter]. You can also type in a filename rather than a port. Filenames can be any valid DOS filename with a maximum of eight characters. You don't need an extension to the filename. If you send the output to a file, you can then print that file from the DOS prompt by typing "**COPY FILENAME PRN /B**" after you exit TEMPRA Access Plus.



Representation Box

The Representation Box displays the relative size and position of the printed area on the paper size selected. The outside rectangle represents the paper. The top side of the representation box is the top of the paper. The inside box represents the printed area. As you adjust the size, the inner box changes.

Print

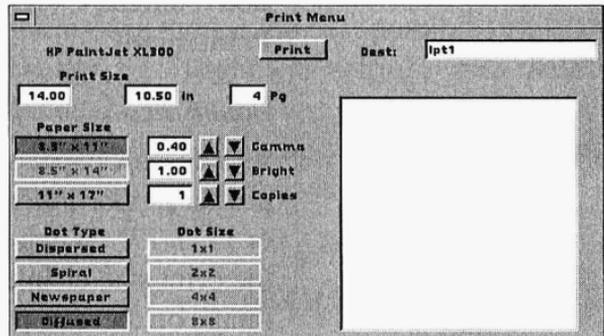
The Print button starts the printing process.

When you select the Print button, the Print menu disappears, the TEMPRA clock appears on the screen, and TEMPRA Access Plus begins sending the image to the printer. When printing is complete, the Print menu returns to the screen.

Print Size

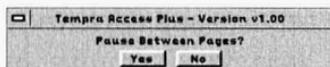
When you first select an image to print, TEMPRA Access Plus sets the controls to produce the largest print possible on a single sheet of paper. To increase or decrease the size of the print, press Select inside one of the Print Size number boxes, enter the new dimension, and press Select.

If you make a change to the x coordinate, the y coordinate automatically changes to a value consistent with the aspect ratio of the original canvas size.

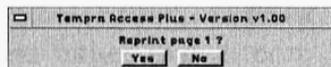


If the change you make to the print size results in the image printing on more than one page, the representative boxes go away, and the number of pages changes automatically. This is called tiling.

When printing a single image on multiple pages (tiling), TEMPRA Access Plus gives you the option of pausing between pages. When you select Print, a box appears asking if you want to pause between pages. Select either Yes or No and printing begins.



If you select Yes to pause between pages, you are given the option to reprint each page. When the first page has printed, a box appears on the screen asking if you want to reprint page 1. If you select No, page 2 is then printed. If you select Yes, page 1 is reprinted and when it is finished you are again given the option of reprinting the page.



NOTE: If you want to print an image in landscape mode, use the Canvas Rotate function from the CVS menu prior to entering the Print menu.

Paper Size

The default paper size is 8.5" x 11". If your printer supports them, you can select 8.5" x 14" or 11" x 17". When you change the paper size, the print size changes automatically to fit the image on the new paper size.

If your printer does not support either of the alternate paper sizes, the box will be grayed out indicating that selection is inactive.

Gamma

The Gamma setting ranges from 0.20 to 2.60. The higher the Gamma setting, the darker the printed image appears on paper. TEMPRA

Access Plus provides a specific default gamma for each printer selected. These settings are based on tests performed during development.

The gamma correction that is applied from the Print menu is the same as the gamma correction from the Color Correction menu, except that it is applied to the print and not the image on the canvas. You will want to experiment with the Gamma and Brightness settings to obtain the best results for your particular printer. To change the Gamma setting, press Select inside the value box and enter the new value. You can also use the up and down fine-tuning buttons to change the value.

Brightness

The default Brightness setting is 1.00 and ranges from 0.20 to 2.00. The higher the Brightness setting, the lighter the printed image appears on paper. You can change the setting to produce the best possible print. To change the Brightness setting, press Select inside the value box and enter the new value. You can also use the up and down fine-tuning buttons to change the value.

Copies

The default setting for the number of copies is 1. If you want to print more than one copy, simply enter the new value in the number box.

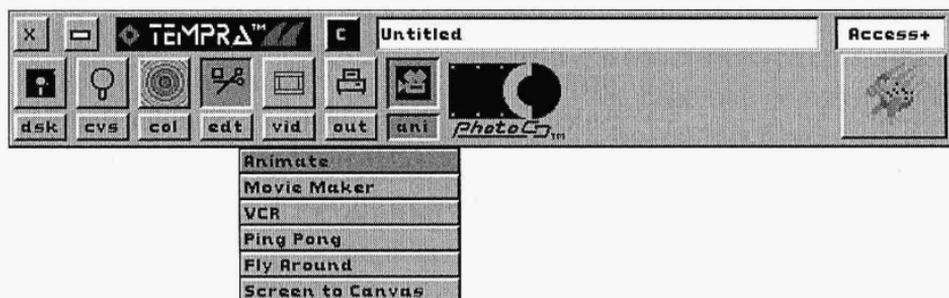
Dot Type

Dot Type determines how ink is applied to paper. For printers that support it, Diffused is the best quality print for most situations. Dispersed, Spiral, and Newspaper have different effects that may be desirable in some instances.

Dot Size

The Dot Size selections are inactive when Diffused is the dot type selected. For Dispersed, Spiral, or Newspaper dot types, you can change the dot size for varying effects.

Animation Editor Functions



The Animation Editor allows you to create video animations using the Movie Maker or VCR features. You can also create graphic animations by loading images from disk or Photo CD and using the Fly Around and Ping Pong features. You can edit existing animations using the Color Correction feature.

The Animation Editor loads .FLI and .FLC (standard 8-bit Autodesk animation files), or .FLX (16-bit TEMPRA animation files) but saves only .FLC files when running in 8-bit, 256-color mode or .FLX files when running in 16-bit, 32,000-color mode.

People who need more paint tools and options for creating and editing animations may want to upgrade to TEMPRA Turbo Animator, which provides 32-bit protected mode image editing using a multitude of painting tools, effects, and

filters. You can apply various filters and effects automatically to enhance your animations in TEMPRA Turbo Animator.

NOTE: The Animation Editor is available when TEMPRA Access Plus is set for 8-bits per pixel of color (256 colors) or 16-bits per pixel of color (32,000 colors). You can't edit animations when TEMPRA Access Plus is configured for 16-bit, 64,000 colors or 24-bit, 16.7 million colors.

To change to 8-bit or 16-bit mode, start TEMPRA Access Plus by typing "ACCPLUS-R" and reconfigure the program for the desired bit-depth. The program launches after each reconfiguration.

In 16-bit mode, any animation files you create or edit are saved as 16-bit .FLX files. You can retrieve 8-bit .FLI or .FLC animation files and save them as 16-bit .FLX files without altering the original file. The first time you play an .FLI or .FLC file while in 16-bit mode, the animation plays very slowly. Subsequent plays appear at normal speed.

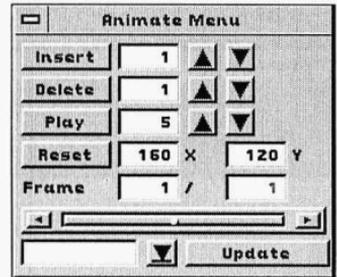
In 8-bit mode, any animation files you create or edit are saved as 8-bit .FLC files. You can retrieve 8-bit .FLI or .FLC files and 16-bit .FLX files. If you load a 16-bit .FLX file while running in 8-bit mode, the file is converted to 8-bit using error diffusion dithering to match the animation to an RGB palette. You can then save that file as an 8-bit .FLC animation without altering the original .FLX file.

The ANI menu has six selections: Animate, Movie Maker, VCR, Ping Pong, Fly Around,

and Screen to Canvas. When you first open the ANI drop-down menu, the only active selections are Animate and Screen to Canvas. Before you can use any of the other functions, you must select Reset from the Animate menu or load an animation.

Animate Menu

The Animate menu is the primary menu for editing, loading, saving, and erasing animation files. The Animate menu also allows you to reset the animation screen size, insert and delete frames, update the current frame, and move animations to and from the disk.



Insert Frames

The Insert Frames button inserts a specified number of frames after the current frame. You can insert from 1 to 99 frames at one time, but you can insert an unlimited number of frames in one animation. The inserted frames will be identical to the current frame when you perform the Insert Frame function.

To insert frames, set the Frame Counter to the frame you want to insert more frames after. Type the number of frames you want to insert into the number box (or use the arrows to increase/decrease the number of frames) then press the Insert button.

All inserted frames take on the characteristics of the frame just before it. So, if frame 1 has an

image on it and you insert five frames, all six frames will have the same image. If the first frame is blank, then all subsequent frames will be blank.

Delete Frames

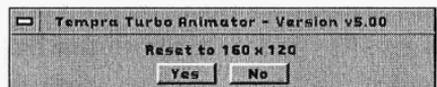
The Delete Frames button deletes a specified number of frames (from 1 to 99) beginning at the current frame. To delete frames, position the Frame Counter on the first frame to delete. Type the number of frames you want to delete into the number box (or use the arrows to increase/decrease the number of frames). Press Delete. A dialog box appears to confirm the deletion. The deleted frames include the current frame plus the frames that follow, up to the total frames designated in the number box. If you're on frame 5 of an animation and you choose to delete five frames, you'll be deleting frames 5, 6, 7, 8, and 9.

Play

The Play button plays the animation. The speed used to play the animation is set in the number box next to the Play button. The speed ranges from 0 to 200 and indicates the amount of delay between frames. The higher the number, the longer the delay and the slower the animation plays. To change the delay between animation frames, simply press Select inside the number box and enter the new number (or use the arrows to increase/decrease the number).

Reset

The Reset button sets the frame



size for your animation. You can set the frame

any size up to the largest screen resolution your display board supports. Display boards support screen resolutions ranging from 320 x 200 to 1024 x 768. You can change the frame size by entering the desired resolution in the X and Y boxes next to the Reset button.

To change the frame size, press Select in the X and/or Y boxes, enter the desired values, and press the Reset button. Be sure to reset the frame size before creating an animation.

NOTE: Whenever you reset your frame size from the Animate menu, any frames of animation that are currently in memory are lost, and the frame counter resets to frame 1 of 1. Whatever is on your screen when you select Reset becomes part of frame 1 of the animation.

Frame

The Frame number boxes indicate the current frame and the total number of frames in the animation. You can change to another frame by placing the cursor in the number box and pressing Select. When the box changes color, type in a new frame number. The slider bar moves to a new location and the new frame appears on the screen.

Another way to move from frame to frame is the slider bar. The slider bar shows the location of the current frame in the total animation. You can move the frames back and forth by placing the cursor in the slider bar. The arrows at each end of the slider bar move the animation forward and backward one frame at a time.

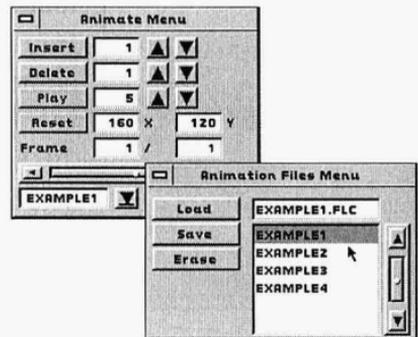
Update

The Update button records the current image on the screen as the current frame. *To save the current frame, you must press the Update button before going to the next frame. If you move before using the Update button, all changes made to the frame are lost.*

NOTE: The Update button does not save animations; it saves the individual frame. You must save the entire animation using the Animation Files menu before exiting the Animation Editor.

Animation Files Menu

The bottom left of the Animation menu contains a filename box with an arrow next to it to open the popup



menu that displays the list of available animation files. This is the Animation Files menu and is used to save, load, and erase animation files. All animations saved by the Animation Editor have the .FLC extension if you're running in 8-bit mode and the .FLX extension if you're running in 16-bit mode, although you can load or erase files with .FLI, .FLC, or .FLX extensions. Files are displayed in alphabetical order and there is a scroll button for viewing files not visible on the initial screen.

Load

The Load button on the Animation Files menu loads a selected file into the Animation Editor. The file must be highlighted in the list of files before it can be loaded. Highlight a file by moving the cursor over the name of the file and pressing Select. The selected file appears in the filename box. Select the Load button to bring the animation onto the screen.

You must designate the directory containing your animation files in the Set Disk Directories menu under "Image" (in the Disk menu on the Main Menu Bar). The Animation Editor looks in the Image path for animation files to be loaded or saved. When you load an animation, frame size is reset to match the frame size of the animation.

Save

The Save button saves the current animation to disk as an .FLC or .FLX file. Animations must be saved to a disk file before you exit TEMPRA Access Plus. Updating a frame does not save the animation to disk. To give an animation a new name, select the filename box above the list of files. The box changes color, prompting you to type in the new name. Enter the new name and select Save.

You can overwrite an existing animation file by selecting the file from the list. The existing filename appears in the filename box. When overwriting an animation file, the Animation Editor prompts you to confirm that you want to overwrite the existing file.

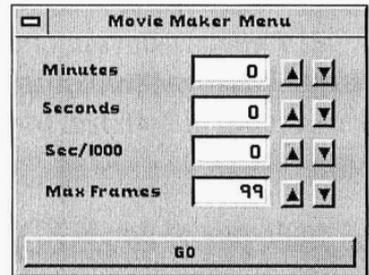
Erase

You can also erase a file from the Animation Files menu. The Erase button erases the high-lighted animation file. When erasing an animation file, the Animation Editor prompts you to confirm that you want to erase the file.

Animations are different from images. Animations are created from images on your screen. You can save an image to disk before exiting TEMPRA Access Plus. However, if you don't save the animation from the Animation Files menu before you exit, all changes made to the animation are lost.

Movie Maker Menu

The Movie Maker feature allows a computer equipped with a SNAPplus or Video Blaster video card to



create an animation using a video camera. The frames in the animation are produced by a set of video image captures. This allows you to create "time-lapse" video clips.

Before using the Movie Maker menu, select SNAPplus or Video Blaster from the Video drop-down menu. (The SNAPplus-full option is not available with the Animation Editor.) Remember to set the palette from the Video menu when using Movie Maker in 8-bit mode.

The Movie Maker menu allows you to set the elapsed time between frame captures. The

Minutes, Seconds, and SEC/1000 number boxes set the time interval between each image capture. The time needed to capture an individual frame is determined by the speed of your computer and the size of the image. It may take up to several seconds to capture and save a 640 x 480 frame. Small frames can be captured in a fraction of a second. The Sec/1000 number box may not have any effect unless you're capturing very small frames on a fast computer.

If you have more than 4Mb of RAM, you may want to use a RAMDRIVE to speed up capturing. Refer to the end of this chapter for hints on how to use a RAMDRIVE with the Animation Editor.

If all the time controls are set to 0, frames are captured as fast as the computer allows. The Max Frames number box determines the number of frames to be captured by Movie Maker. The maximum you can capture at one time is 999.

To capture images from a video camera:

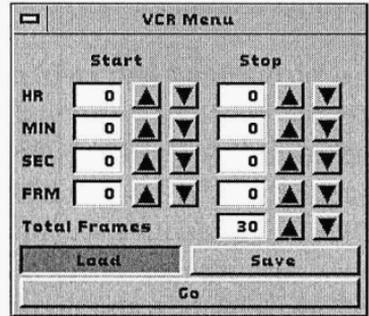
1. Initialize the video from the Video menu.
2. Reset the frame size from the Animate menu.
3. Go to the Movie Maker menu and designate the delay between frame captures and the maximum number of frames to be captured.
4. Select GO to start capturing frames.

To stop capturing frames, press and hold the right mouse button.

NOTE: Remember that you still need to save your animation to disk using the Animation Files menu.

VCR Menu

The VCR feature allows you to create animation files from a videotape or play animation files from your hard disk and record them to



videotape. Your computer must have a VISCA compatible VCR attached and have a SNAPplus or Video Blaster card installed in order to use this feature.

Before using the VCR menu, be sure that:

1. Tapes are time coded.
2. Tapes are not wound to the very beginning or the very end.
3. If you are using a serial port other than the default port com2, your AUTOEXEC.BAT file must be modified to include the statement SET VISCA_PORT=n (where n is the number of the com port to which the VCR is connected).

Load

Use Load to capture frames from a VCR to be stored as an animation file. To load video from

a VCR, follow the steps below.

1. Set the location on the tape where you want to start grabbing frames.
2. Set the location on the tape where you want to stop grabbing frames.

Remember that frame accuracy with Sony VISCA compatible VCRs such as the Vdeck is ± 2 frames, so you may want to set the starting point a few frames before the one you actually want to be the first frame and the stopping point a few frames after the one you want to be the last frame, then later you can delete the unwanted frames.

3. Set the number of Total Frames you want to grab. "Real-time" video is 30 frames per second, so be sure that the number of frames corresponds with the time designated—i.e., 1 second = 30 frames, 2 seconds = 60 frames.

NOTE: Animation files take up a lot of disk space. For example, a 1-second, 30-frame, 256 x 100 pixel animation file requires about 3Mb of disk space.

4. Select Go.

The first frame that is loaded from the VCR overwrites the frame that is currently active in the animation. Therefore, if you want the current frame to be part of the finished animation, you need to insert a blank frame before you start to load frames from the VCR.

Save

Use Save to record frames from an animation file onto a videotape. If Save is active, the Stop portion of the VCR menu is disabled. Be sure the output of the SNAPplus or Video Blaster is connected to the video input of the VCR (if you are using a Video Blaster, you must have an NTSC converter to use the Save feature).

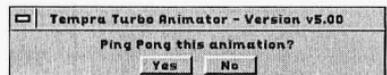
Before using Save to record frames from an animation file onto a videotape, your screen size must be set to 640 x 480, regardless of the frame size of your animation. If your animation is 320 x 200 and your screen size is 640 x 480, the animation will be saved to tape with the animation in the middle of the screen. To save an animation to videotape, follow the steps below.

1. Set the location on the tape where you want to start recording.
2. Set the number of Total Frames you want to record.
3. Select Go.

If the total number of frames set to record is greater than the number of frames in the animation, the Animation Editor returns to the beginning of the animation and continues playing frames from there. Animations are recorded to videotape at the same speed at which the animation is played.

Ping Pong Menu

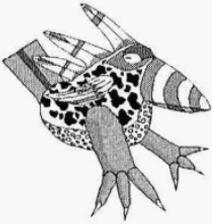
The Ping Pong feature



of the Animation Editor takes an existing animation and reverses it, adding to the existing animation. If you have a 5-frame animation and choose Ping Pong, frame 4 is duplicated as frame 6, frame 3 is duplicated as frame 7, etc. The number of frames of the new animation is twice the number of original frames minus one.

In other words, if you start with a 5-frame animation and choose Ping Pong, the animation will then have 9 frames. Suppose you have a 5-frame animation that counts from 1 to 5, with each frame of the animation displaying a different number (1-2-3-4-5). After you ping pong the animation, it counts from 1 to 5 and then back down to 1 (1-2-3-4-5-4-3-2-1).

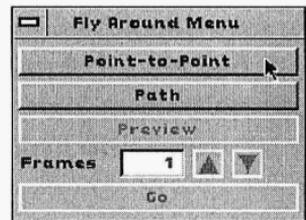
To ping pong an animation, select Ping Pong from the ANI drop-down menu. When you see the message “Ping Pong this animation?” select Yes.



Use Fly Around to move an object across your animation or from the top to the bottom. This can produce the scrolling credits seen at the end of a movie. To make your credits, place your text on the canvas. Then create a path that runs from the top to the bottom. The words will appear to float up in your animation.

Fly Around Menu

The Fly Around feature allows you to create the illusion of motion video from a still image. This is done by grabbing small frames from a large image and playing them as an animation. Fly Around only works when your image or canvas size is larger than the frame size of the animation you want to create.



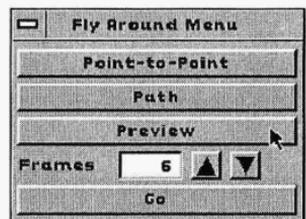
There are two methods for using Fly Around: Point-to-Point and Path. Point-to-Point lets you determine exactly where each frame of

animation will be taken from the image. Path lets you select a beginning and ending point (as well as any number of points in between) and the total number of frames of animation to grab.

NOTE: When using Fly Around, the current frame is overwritten. So, if you want the current frame to be a part of the final animation, insert a frame before you start to use Fly Around.

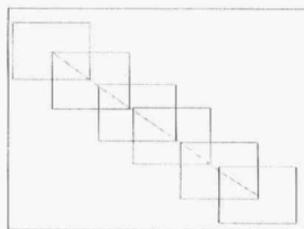
To use the Point-to-Point method of Fly Around to create an animation, follow the steps below.

1. Load an image from the disk or Photo CD.
2. Select Animate from the ANI drop-down menu and set the size of your animation to be smaller than your image or canvas size.
3. Select Fly Around. Select Point-to-Point.
4. The Fly Around menu disappears and you see a small ghost box the size of the animation you are creating. Move this box to the first place on the image where you want to “grab” a frame of animation and press Select.
5. Now move the ghost box to the next location on the image where you want to “grab” a frame of animation and press Select. Continue doing this until you have placed all the frames you want.
6. Press Cancel and the Fly Around menu re-



turns. Notice that the number of frames now matches the number of boxes you placed on the image.

7. Select Preview to see a representation of where the frames of animation will be taken from on the image. You will see a series of ghost boxes at each location you selected.



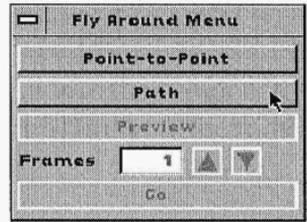
8. Press Cancel to return to the Fly Around menu. Press Go and the Animation Editor begins “grabbing” a frame of animation from each place you selected on the image. As each frame is updated, the TEMPRA clock appears on the screen, letting you know that work is in progress.

When Fly Around is complete, the Fly Around menu returns to the screen. Press Cancel and select Animate from the ANI drop-down menu to play and/or save the animation.

To use the Path method to create an animation, follow the steps below.

1. Load an image from the disk or Photo CD.
2. Select Animate from the ANI drop-down menu, and set the size of your animation to be smaller than your image or canvas size.

3. Choose Fly Around, then select Path.

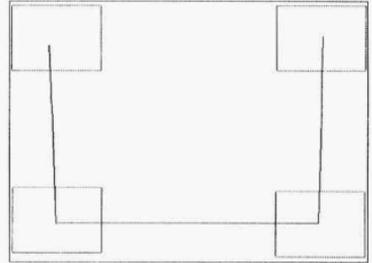


4. The Fly Around menu disappears and you see a small box the size of the animation you are creating. Move this box to the first place on the image where you want to “grab” a frame of animation and press Select.
5. Now move the ghost box to the last place on the image where you want to “grab” a frame of animation and press Select.
6. Press Cancel to return to the Fly Around menu. Notice the number of frames matches the number of boxes you placed on the image. Press Select inside the number box and enter the number of frames you want for your animation.
7. Select Preview to see a representation of where the frames of animation will be taken from on the image. Notice that the Animation Editor places frames between the first and last frames you selected on the screen. The location of these frames is determined by where on the image you selected the first and last frame, and by the number of frames you choose to include.
8. Press Cancel to return to the Fly Around menu. Press Go to begin “grabbing” the frames of animation. As each frame is updated, the TEMPRA clock appears on the screen, showing that work is in progress.

When Fly Around is complete, the Fly Around menu returns to the screen. Press Cancel and select Animate from the ANI drop-down menu to play and/or save the animation.

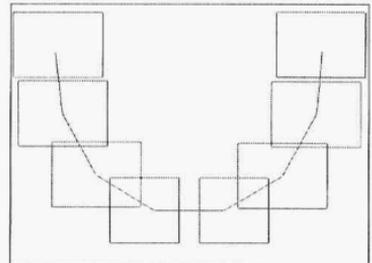
NOTE: When using the Path method to create animations, the final location of the frames of animation may not be exactly where you expect them to be.

For example, if you place four boxes in the corners of the screen starting with the upper left corner proceeding counter-



terclockwise (see the figure at the right) and then select 8 frames from the Fly Around menu, the results include the first and last locations exactly where you placed them, in the upper left and upper right corner of the screen. But you don't get frames from the bottom left and bottom right of the screen. This is because the Animation Editor places the inserted frames in an equidistant relationship to the frames you placed on the screen.

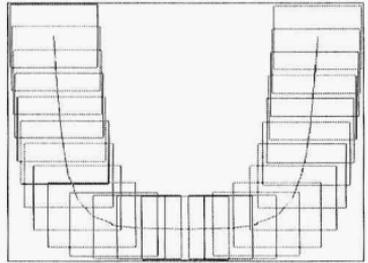
Your results include a frame in the upper left and upper right corner of the screen. The Animation Editor then tries to fol-



low a path along the line of the four frames you

placed on the screen. But since all eight frames have equal distance between them (measuring from the center of one frame to the center of the next), your final results are similar to the figure at the right.

The more frames you select to be included in your animation, the closer the inserted frames are to being where you expect them to be. If you place four frames on the screen as described above and then select 25 frames from the Fly Around menu, your results are similar to the figure at the right.



If you want frames to be positioned at precise locations on the screen, then your best method is the Point-to-Point method. Using Point-to-Point, the Animation Editor grabs frames from the exact location(s) you select.

Screen to Canvas

The Screen to Canvas selection from the ANI menu allows you to make your animation part of the TEMPRA Access Plus canvas and apply Color Correction from the COL menu to individual frames of animation. Be sure to update each frame after you apply Color Correction.

Hints And Combinations

Using RAMDRIVE With Movie Maker

If you have more than 4Mb of RAM, you can

use a RAMDRIVE to speed up frame grabbing with Movie Maker. A RAMDRIVE is a virtual drive that is made from RAM when your computer boots. To set up a 4Mb RAMDRIVE, add the statement below to your CONFIG.SYS file.

```
DEVICE=C:\DOS\RAMDRIVE.SYS 4096 /E
```

The TEMPRA directory should be in your DOS path. Before running TEMPRA Access Plus, copy ACSPLUS.OVL to your RAMDRIVE. Change from your hard drive to your RAMDRIVE and run TEMPRA Access Plus from there. Movie Maker will capture about three times faster when using a RAMDRIVE.

NOTE: If you save any files to a RAMDRIVE, be sure to copy them to your hard disk before you reboot or turn off your computer.

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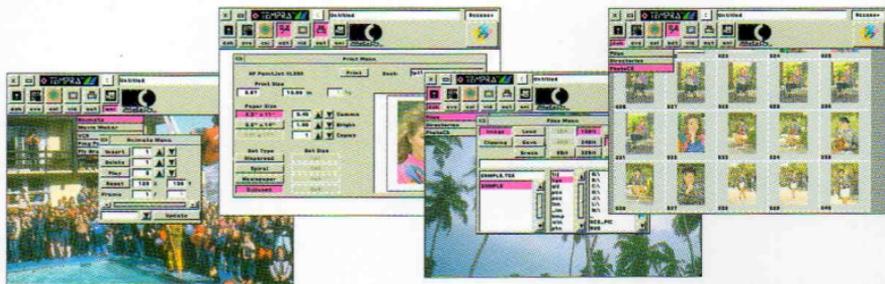


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