THE MULTIMEDIA WORKSHOP Version 12.XX

Presentation Creation Program Copyright 1994, Jeff Napier & Another Company Instruction Files For Shareware Edition

NOTE: TMW is a shareware kit that is derived from a larger package called Computer Magic, which is what you get when you register TMW. With this shareware version, you can make complete, professional and fully-functional presentations. However, because it must be a reasonably small package for mass distribution, several extra features have been left out. Among the items left out are one of the two online help systems, and quite a few text files. This may require that you experiment a bit to learn all of TMW's features.

Please feel free to copy, distribute, upload and discuss TMW at every opportunity as long as all files remain intact and unchanged. Any exposure you can give this kit helps me tremendously!

INTRODUCTION

WHO IS THE MULTIMEDIA WORKSHOP FOR?

TMW was created for anyone who has something to say. Use it to make professional-quality disk-based illustrated catalogs, teaching tutorials or computer-based training (CBT) materials, electronic books, multimedia presentations, retail or shareware products.

Even without artistic talent, but with just a little practice, you'll be able to turn out impressive disks with drawings or simple yet effective diagrams containing colorful boxes, ellipses, arrows etc, to make your point! Furthermore, you can collect and use clip-art, files created by other people, in most standard .PCX or .GIF formats or in ASCII-Vector-Graphics, a very efficient file format.

WHAT DOES TMW DO?

TMW is a drawing program that does a whole lot more than any other drawing program. It allows you to incorporate sound effects, music and speech into pictures without special equipment. You can create animation with it. TMW has a simple word processor built in. There are features found in CAD programs, such as Grid and Coordinate Display so that you can create very precise pictures. These multimedia pictures can be drawn in CGA, Hercules, EGA, VGA or Super-VGA graphics, depending on which video modes your computer can support. There is even an XGA mode, which brings nearly Super-VGA resolution to computers which do not have Super VGA. TMW runs fine with or without Microsoft Windows.

It comes with a run-time display engine allowing you to chain your pictures together for sophisticated presentations. The run-time engine has features including automatically repeating shows for continuous unattended presentations, automatic indexing and search facilities, Live Text which scrolls within your pictures, Hyper-Link with which your end users can view your presentation in the sequence they select, and super-easy-to-use keyboard or mouse operated menu.

TMW uses ASCII-Vector-Graphics, a wonderful system in which each element of a picture is recorded in an ordinary ASCII text file on disk as it is drawn. For instance, a

rectangle appears in the file as R followed by integers representing the location and size of the rectangle. A circle is represented by a C, followed by numbers marking it's location and radius. A line is represented with an L, an ellipse is an E, and so on. Color changes have codes, sound effects have codes, and so on. Text that appears in the pictures is plain text in the ASCII file, although it is preceded by the name of the selected font and some simple numbers representing the position of the text in the picture.

The advantages of AVG are tremendous. Most significantly, a whole lot of graphic information can be written into a really small file. This means you can put up to 100 separate pictures on an ordinary 360k floppy disk! Furthermore, Ascii-Vector-Graphics is the secret behind sound effects, animation and text-search within pictures. If you communicate on BBS's you'll especially appreciate that complicated illustrations can be sent by modem very quickly, because of their small size.

HOW IT WORKS

The files which compose a presentation are simply ASCII files which contain codes for picture elements, sound effects, animations and more. We call them SCRIPT FILES. TMW.EXE or TMWSHOW.EXE read these files and follow the coded instructions, step-by-step, to recreate your pictures, animations, sounds, etc.

REQUIREMENTS

The requirements are few. Almost any IBM-compatible computer will work if it has a standard CGA, Hercules, EGA or VGA graphics card and a hard disk. At least 640k of RAM is also required. It works fine on laptop computers with monochrome displays.

If you have a mouse, hard disk, and a fast CPU, TMW runs more efficiently, but these options are NOT required. It works fine with or without Microsoft Windows version 3.0/3.1.

If your computer has a VGA graphics system, you'll be able to create presentations in high-resolution VGA, or lower resolution CGA, Hercules or EGA, for use on other computers.

If your computer has a non-VGA graphics system, you'll be able to create presentations at the highest resolution and number of colors your system can support. These will be displayable on other, similarly-equipped computers as well.

Any end user with a standard IBM-compatible computer and graphics card and at least 512k RAM will be able to display your creations. End users do not need hard disks.

LEGAL STUFF

Jeff Napier & Another Company, and everyone associated with The Multimedia Workshop do not accept responsibility for your use of TMW. With software of this magnitude there are likely to be several small bugs and situations created by unusual combinations of functions. We recommend that you experiment and find solutions to any inconveniences you may discover. Make back-up copies of your distribution disks and all of your script files.

No Technical Assistance via Telephone

In order to maintain the lowest possible cost in a software kit which offers so many functions, we can not offer technical assistance via e-mail, regular mail or telephone. However, we do offer limited technical support on America

Online. Come visit the Another Company product support forum on America Online. (use keyword: Another Co) Also:

A Hypertext/Electronic Publishing Resource Center is slated to debut on America Online late in 1994. The center will feature message and file areas devoted to electronic publishing, as well as text areas featuring epub news and howto articles Classified and Product Vendor sections are also planned to help authors publicize electronic publications and epub viewers. In addition to support for electronic books and hypertext, the center will offer links to libraries of plain ASCII texts, and electronic magazines. For more information, send a email message to the AOL screen name EPUB, with the subject MAILING LIST (via Internet: EPUB@AOL.COM). See you there!

Fortunately, you'll find TMW easy to use and reliable, especially if you are willing to read these files and experiment a bit.

A COUPLE OF TIPS

If you are not the type to read owner's manuals of this size from cover to cover, you'll be happy to know that you can run TMW intuitively. However, there are some tips which might help:

- * You can change to another video resolution at any time by selecting VIDEO from the main menu. The best time to change video mode is at the beginning of a new file.
- * TMW puts all the files you create in their own directory, separate from other files on your hard disk. It automatically copies runtime files (such as fonts) that you need into this "work" directory. To switch from one project to another, you switch to another work directory. If you enter a directory which does not yet exist, it is created automatically.
- * To import a PCX or GIF image, go to third icon in the top row of the main menu, then select the PCX or GIF icon. As shipped, TMW will hook in a picture file automatically, as soon as you type it's name or select it from a list.
- * There are some adjustments which control the way TMW operates. In the DOOR on the main menu are some sub menus with which you can control the amount of pop-up help, the amount of manual override possible, whether a top hint bar and coordinate display appear or not, the colors of menus,
- * At the top of most sub-menus is an UNDO feature, represented by a U. Undo works on graphics, sounds, text, and user interaction. Almost anything you can do, you can undo. Click on the U or press [U] on your keyboard to undo the last step you have performed. You can select UNDO as often as you like, all the way back to the beginning of the file.

Intention

It is my desire that you will find TMW useful and enjoyable! As a user of TMW you have a lot of power. If you can employ this power in some way to help make the earth a greener, safer, saner place to live, that would be appreciated. - Jeff Napier, d.b.a. Another Company -

GETTING STARTED

Make a back-up copy of your original disk and put it somewhere safe. $\!\!\!\!$

If you have a mouse, make sure your mouse driver is loaded*. Then switch to the directory containing your TMW files, type TMW, and press [Enter]. (From this point forward, for ease of reading, I won't say, "press [Enter]" when doing so would be obvious.)

*NOTE: When running under Windows, you still need a mouse driver file in your AUTOEXEC.BAT or CONFIG.SYS file.

You will be asked to type a "work" directory name. This will be a directory on your hard disk in which the files you create will be stored. When first starting, type a directory name which does not yet exist, and it will be created for you. Do not type a filename yet. You can give it any DOS-legal name you like, such as:

- c:\tmw\mystuff
- c:\horses
- c:\cats\kittens

(this last assumes you already have a directory called cats, and makes a new sub-directory called kittens.)

Optionally, if you have put TMW in the PATH statement in your AUTOEXEC.BAT file, you can type TMW when logged to that directory, and it becomes the suggested work directory.

Then you are prompted for a script file name. You can type just about any DOS-legal filename here, but we recommend that you avoid names ending with extensions such as .COM, .EXE, .BAT, .PCX or others which may be confused with other types of files. If you type a filename which already exists, it will be loaded into the program so that you can view or modify it. If you type a new filename, it will start with a blank screen. (Starting with a new file is recommended if you are brand new to TMW.)

The program knows your system and will use the best standard video mode available. If you want to use a different video mode, or switch to a XGA or Super-VGA mode, you can do it at any time, but at the beginning of a new file is the best time to do it. To switch video modes, select VIDEO from the main menu.

THE CONVENTIONS

IF YOU ARE USING A MOUSE: The left mouse button generally selects an action and answers questions affirmatively. It is also like pressing [Enter].

The right mouse button ends or cancels actions and answers questions negatively. It is also like pressing [Esc]. In most drawing modes such as circles and boxes, the right mouse button is held down when you want to change the size/shape of an object.

With three-button mice, the center button is useful although not necessary. In most drawing modes such as lines and ellipses, it will cancel an object. In other cases, it will bring up help. In drawing solid and dotted lines, the center mouse button toggles "Float mode" to move drawn objects to new locations.

The spacebar on your keyboard will work the same as the center mouse button to cancel drawing objects, and to toggle Float mode, so two-button mice are fully capable of three-button operations.

In most cases, when the program calls for pressing $[{\tt Enter}]$, you can click the left mouse button for the same result. And a click of the right mouse button can replace

pressing [Esc] in many parts of the program.

KEYBOARD

Whether or not you have a mouse, you can also control TMW from the keyboard. The [Enter] key simulates the left mouse button. Use [Enter] to select actions or answer questions affirmatively. The [Esc] key simulates the right mouse button. Use it to end or cancel actions, answer questions negatively or bring up on-line help.

TO MOVE THE CURSOR (ARROW) WITH THE KEYBOARD: For fine control, use the arrow keys. Turn the [Num Lock] key off for fine control. You can also move the cursor diagonally with [Home], [End], [Page Up] and [Page Dn]. For coarse control, turn the [Num Lock] key on, and use the same keys.

In other words, with [Num Lock] off, the right arrow or [6] key moves the cursor one pixel at a time to the right. But when the [Num Lock] is on, the [6] key moves the cursor about 10 pixels to the right each time it is pressed.

FOR COARSE CONTROL: [Num Lock] = ON FOR FINE CONTROL: [Num Lock] = OFF

SIZE MODE / MOVE MODE

Many drawing options involve placing a rectangle or other object in the picture and adjusting its size. With a mouse, moving the object is done by moving the mouse while no mouse buttons are held down. To change the size or shape of the object, the mouse is moved while the right button is held down.

From the keyboard, this is done differently. To move an object, use the arrow or number keys. Then, to change it's size, toggle SIZE mode with the spacebar. Click it once. Now, when you press number or arrow keys, the shape or size of the object changes. To return to MOVE mode, click the spacebar again. The spacebar also toggles SIZE and MOVE mode with the mouse, so if SIZE is in effect, even without any mouse buttons pressed, an object will stretch without moving on the screen until the spacebar is pressed again.

This point can be confusing. If an object misbehaves, chances are, you have to press the spacebar.

THE MENU SYSTEM

To select an item from a menu, point to it with the on-screen arrow, then press [Enter] or the left mouse button.

TMW is controlled by a two-part menu system. The main menu contains 36 icons, many of which, when selected, present sub-menus. Since some of the icons may be a bit cryptic, you can look at the top of the menu for a brief description of each item as you move the arrow over the icons.

The main menu (and most sub-menus) are movable so that you can see any area of your underlying picture. To move the menu, move the arrow to the title bar at the top of the screen, and press [Enter] or the left mouse button. The menu will be replaced with a rectangle which will follow your mouse or arrow key movements. When satisfied with the new location, press [Enter] or the left mouse button again.

Also at the top of the main menu is a little box at the left. This will entirely hide the menu until any key is pressed, so that you can see your whole picture.

At the right of the title bar on the main menu is a color box which shows the currently selected color. Point and press to pop up a color menu to select a new color.

SUB-MENUS

Since there are way more than the 36 functions the main menu represents, many selections result in sub-menus offering more choices.

Select sub-menu items in the same way as from the main menu, by moving the pointer to the item you want and pressing [Enter] or the left mouse button.

You can also select items from sub-menus by pressing the key corresponding to the letter on the right side of the sub-menu item. To return to a previous menu press [Esc], the right mouse button or select "Esc" from the menu.

There are several features built into the top of most sub-menus. If you put the arrow on the title of the menu (in the black box), and click the left mouse button or press [Enter], the menu will become movable to anywhere on the screen. Click the left button again or press [Enter] to set the menu in a new location. On the very left of the menu title is often a "?" which you can click on for instant access to the help system. Next to the "?" is a little box showing the current color (used for drawing, text, etc.) which brings up the color selection menu. Next to that is a "V" which is VIEW, used to replay the current script file from the beginning to see it exactly as the end users will.

To the right of the menu title bar is a "U" which is UNDO. Clicking on this deletes the last line (or group of lines) from the script file. This will remove almost anything you add, an element of drawing, a line of text, a change of color, a link, a sound effect or even hooked files.

Next, moving to the right, is a down arrow. Clicking on this brings back the main TMW menu. And on the very right of the top of the menu is a "-" which acts like pressing the [Esc] or clicking the right mouse button, it brings you back to the previous menu level.

These common menu features can also be accessed via the keyboard: Press [H] or [F1] for help, [C] to change color, [V] for View, [U] for UNDO or [Esc] to cancel. There is no keyboard access to the down arrow function, but pressing [Esc] two or more times in a row has the same effect.

TIED TOGETHER

The left mouse button and the [Enter] are usually tied together. This means that pressing [Enter] or clicking the left mouse button usually have the same result. Similarly, the right mouse button and the [Esc] key are usually tied together.

COLOR CHANGES

Since TMW can use PCX and GIF image files, and since they don't always play by the rules with palette color changes, automatic provisions have been made. When the main menu is on the screen, the colors are temporarily standardized so that you can see all the icons clearly. When sub-menus are on the screen, the image is allowed to control the colors, although the sub-menus and mouse pointer usually manage to maintain usable colors. The result is that badly behaved PCX and GIF images can show some truly bizarre color change effects when switching between menus! This will not be visible to end users of your presentations.

TMW'S FUNCTIONS, IN DETAIL

(Functions are listed alphabetically)

ADJUST MENU -

This is a sub-menu offering control of several TMW basic

behaviors such as whether the hint bar or the coordinate display are presented, the help level, and whether drawing operations use Xor or WYSIWYG mode.

ADJUST PRESET - see PRESETS

ADJUST SPRAY -

Use this to control how the SPRAYPAINT function works. You can control the density (speed) of paint flow, and you can control the width of the pattern. If you are drawing from the keyboard, the SPRAYPAINT function tends to run too fast. Readjust to suit your tastes with this option.

You are asked to type numbers for density and pattern width. The range is 1 to 40. A high density causes lots of paint to flow quickly and a small number is a lighter spray, but easier to control. A large number for pattern width results in a wide spray, and a small number sprays paint over a small area.

Your settings will remain in effect until you reselect this function and change them or quit the program.

ADVANCED COLOR MENU -

This is a sub-menu offering several color functions including changing a single palette color, modifying contrast, brightness and hue, and changing pop-up colors used by sub-menus and TMWSHOW Presentation Mode.

ANIMATE BLOCK - (see also MOVE BLOCK)

You can select a small portion of the screen, and move it with your mouse, just like MOVE BLOCK, but this function records the path of your movement and duplicates the animation in the script. You will be asked to move/size/shape a rectangle to mark the area to be moved. Then you are asked to type a number, representing the number of milliseconds between each step of the movement. A small number like 5 gives you a very fast animation, and 500 would be very slow. 20 is a good, average time. As soon as you type a number and press [Enter] (or left mouse button), recording of your movement begins. Each movement of the mouse or with arrow/number keys, results in a line being written into the script file, reflecting the movement of your animated block. NOTE: for best control, use the arrow keys, and move one pixel at a time. When done, press the left mouse button or [Enter].

Animate is flicker-free in modes 3,4,5 and 7. These are EGA Hi and Lo, Hercules and VGA-Lo 256-color. In modes 1 and 2, the CGA modes it is very nearly flicker-free. In modes 6,8 and 9, VGA-Hi 16-color, XGA and SVGA, it may flicker. If you want to reduce this effect in these modes, select small areas to animate, and experiment with different amounts of delay time between steps.

In all modes, moving a very small area looks better than attempting to animate a large block.

Since the program has to pause to read more data from disk every 16384 bytes, if you have a long script file, you may want to select BREATHE IN before starting an ANIMATE. BREATHE IN reads the disk and refreshes the RAM immediately, so that the computer will not have to look at the disk again for 16384 bytes. This ensures that your animation will not be paused in the middle for a disk read.

TMW.EXE has a capacity to remember only 1000 steps in a block animation, so extremely long animations will have to be done in pieces.

ANIMATE can be used with LOOP, to create continuous movement. If you use this combination, then you must be careful that the animation ends where it started. Otherwise, each iteration of the loop will be different!

ARC

Arcs are portions of ellipses (or circles) Arcs are are drawn in the same manner as circles (which see), but you

have two additional controls, Length and Rotation.

Toggle "Length Mode" by pressing the [L] key. You can make an arc which is so short it is invisible, or one so long that you have a complete ellipse by moving the mouse sideways, or by using the left or right arrow keys.

Toggle "Rotation Mode" by pressing the [R] key. You can turn the arc around to any angle you wish by moving the mouse sideways, or by using the left or right arrow keys.

If you have toggled any mode with the [spacebar], [L] or [R], you can turn it off again by pressing the same key. Furthermore, if toggle any other mode while one mode is active, the first mode is canceled so the other one will work unaffected. In other words, If you have been using Length Mode, then press the [R] key, Length Mode quits automatically, while Rotation Mode starts.

AUTOMATED LIVE TEXT - (also see LIVE TEXT)

If, having read about Live Text, or perhaps even trying to use it, you find it quite complicated, you'll be happy to note that AUTOMATED LIVE TEXT was made to simplify the process. When this feature is selected, you are asked to type a filename. Then a rectangle appears. You cannot change the size of this rectangle, it indicates the area required for a Live Text box using the currently selected text file and font. Move the rectangle to the area you want to contain the Live Text, then press [Enter] or the left mouse button. Live Text will occur there. (Press [Esc] or the right mouse button when done previewing the Live Text.)

Automated Live Text will let you know if you are trying to do something impossible. It will issue a warning and not let you use a non-existent file, or one which contains lines of text wider than the screen (in the currently selected font).

To make the function as easy-to-use as possible, you cannot change the colors of Automated Live Text. The text will always appear in white, within a blue box, with a black shadow. You cannot change the height of the Live Text box, it is always approximately half of the total height of the screen. Well, actually, you can change the colors and dimensions, if you edit the script file, since Automated Live Text simply writes all the ordinary lines necessary for Live Text within a shadowed, bordered rectangle into the script file.

NOTE: For best effect you might want to edit the Automated Live Text script lines to make the bottom of the text box better line up with the bottom line of Live Text, but this is quite easy to do, simply let the Live Text run deeper (increase the last number in the line which starts with "ty".

Even if you are an experienced user ("Power User!") of TMW, you may still like to use Automated Live Text rather than Live Text, because you can set up a Live Text box faster by simply using Automated Live and making some specific changes, rather than by successive approximation of box sizes with regular Live Text.

AUTO SOUND - see SOUND - AUTO SOUND

BEGIN LOOP - see LOOP

BIG MENU -

This function shows you 132 of the most commonly used functions in alphabetical order, so that you can quickly find a function which might otherwise be hard to locate.

BITMAPS MENU - (see also GIF, PCX)

This is a sub-menu of functions for importing and creating PCX and GIF images.

BLOCK ANIMATE - see ANIMATE BLOCK

BLOCK MENU - (see also, ANIMATE, COPY, FLIP, MOVE, ZOOM)
This is a sub-menu of block drawing operations including
Move, Copy, Animate, Flip and Zoom. These generally present
a rectangle on screen which you move and size to enclose an
area of your picture. The area you select is changed or
moved.

BLOCK IMPORT -

This option will transfer text from an ASCII file verbatim, except it will use the currently selected typeface and font size.

You must first prepare your text. It must be in standard ASCII format. Almost all word processors can make ASCII files (plain text) but many use non-ASCII formats to include coding for fonts, special right justification and other special things. Each word processor handles ASCII differently, so you'll have to read your word processing program's documentation to use ASCII format.

If your text file contains more text than would fit in a single picture, you must break it up into several smaller disk files, each containing the text for one picture. Each of these files must have the text formatted into a block which will fit on the screen. Lines of text 75 columns wide, will not fit in a space half as wide as a whole picture, for example. Each block must contain no more than the number of lines a picture can contain.

How many columns and lines are allowable? There is no easy answer, because different graphic modes and different fonts require different amounts of text space. Generally, using DEFAULT font, the graphics modes with 640 pixels horizontally - CGA-HIGH, EGA, Hercules and VGA, can handle lines of text up to 76 characters wide. In the case of 200 vertical pixels, such as CGA-HI, and EGA-LO, you can fit as many as 18 lines of text when using the smallest font.

To get your text block sizes to fit really well, you'll have to experiment a bit.

To use IMPORT TEXT, you will be asked to name a file. This is the file containing ASCII text to import. Then a dotted rectangle will appear on your picture representing the amount of area your text will require. Move the rectangle to the proper location, then click [Enter] or the left mouse button. If IMPORT TEXT overwrites the background of a picture, simply select VIEW from the main menu to see the finished product.

BUILD MENU - (see also BUILD PRESENTATION, VIEW PRESENTATION)

There are two technologies used by TMW for presenting more than one script file. One is BATCH MODE, typically using HYPER-LINKING, discussed in detail throughout these chapters, the other is PRESENTATION MODE, which is automated in TMWSHOW.EXE. With Hyper-Linking, authors can create very flexible presentations in which users can randomly steer through the available files.

Presentation Mode is more structured, so that the users will generally follow the course laid out by the author. The two systems may be mixed together. For more information about Hyper-Linking, see the Hyper-Link chapter. For more information about Presentation Mode, see the TMWSHOW, The Runtime Engine chapter. The BUILD MENU is for Presentation Mode and has no effect in Hyper-Linking.

This sub-menu is for connecting several script files together into a presentation. A presentation is two or more script files chained together. This is done by listing them in a special file called CMSHOW.CFG. When the run-time program TMWSHOW.EXE or TMW.EXE sees this file, it is read to find out which files you want presented and in what order. You can list up to 132 files in a presentation. They will be shown one after another unless the end user selects options such as SEARCH, GOTO, FIND or BACK.

Use of the BUILD menu is essential if you use

CMTEST.EXE, since it is based on Presentation Mode.

BUILD PRESENTATION - (see also VIEW PRESENTATION)

Use this function to build or modify the list of files to be presented. When selected, a full-screen spread-sheet like menu appears. If there is no existing CMSHOW.CFG file, all cells will be empty. If there is a previous CMSHOW.CFG file, then the menu will contain the files listed in CMSHOW.CFG. You can delete existing files and add your own. Simply move to the cell where you want a file to appear, then type the name of that file. The program reads the first column from top to bottom, then moves to the next column, etc.

Do not use drive and path designators with file names. The files which are to be displayed should all be in the same directory as TMWSHOW.EXE or TMW.EXE. When the end user gets a disk with your presentation on it, the script and TMWSHOW.EXE will all be on the same disk (or in the same Zipped BBS file). If you try to add drive or directory information here, and if the end user's computer is not configured like yours, Bloopie!

Although you can leave spaces between files, it is not a good practice to do so.

When done with the BUILD menu, press [Esc]. The new CMSHOW.CFG file will automatically be written to disk. If you have an important version of CMSHOW.CFG already, you ought to make a back up copy first.

In addition to script files, you can also include .EXE, .COM, .BAT or .PCX files in this menu, and these programs/files will be executed or displayed directly.

BREATHE IN -

This function makes your large script files run better from slow hard disks and floppy disks. When a script file is larger than 16,384 bytes, the program runs to that point, then reads more data from the disk before continuing. This may make an undesirable pause if it occurs while playing sound effects, music or an animation sequence. You cannot prevent this pause in long script files, but you can control when it occurs. If you select the BREATHE IN option just before sound effects or animations, you guarantee that there will be no interruptions in the next 16,384 bytes of script file read.

CENTERED TITLE - (see also LEFT TITLE)

When selected, an arrow appears. Move it to the desired location and press [Enter] or click the left mouse button. You can then type a line of text centered around where the arrow was. The current color, and font will be used.

To center a line of text in the exact middle of the screen, use the coordinate display in the upper right corner. In most video modes, 320 is the middle of the screen. In VGA-LO and CGA-LO, the center position is 160.

CFG FILENAME - (see BUILD MENU, BUILD PRESENTATION)
This items pertains to the CFG file(s) used in optional Presentation Mode.

Normally TMW.EXE and TMWSHOW.EXE expect the name of the file which contains the script file itinerary to be CMSHOW.CFG, but this is not set in concrete. You can use any other filename as long as the last 4 characters are '.CFG'. With this option, you set TMW.EXE to use a .CFG filename of your choice. To get TMWSHOW.EXE to display files from a .CFG file other than CMSHOW.CFG, type TMWSHOW at the command line followed by the custom .CFG filename.

CHANGE COLOR - see CHOOSE COLOR

CHANGE MODE - see VIDEO

CHANGE PALETTE -

In EGA-HI mode, although only 16 colors can be shown on screen at one time, these 16 can be any of 64 possible colors. In VGA, XGA and Super-VGA modes, the 16 or 256 on-screen colors can be chosen from 262,144 possibilities.

When CHANGE PALETTE is selected, you are prompted to pick a color to change. A menu pops up giving you a choice of choosing the color from the picture, or from the palette. To choose from the picture, point to an area containing the color you want to change and press [Enter] or click the left mouse button. By choosing from the color palette, you can change a color which is not yet incorporated into your picture.

Once the original color is selected, you can change it by moving the mouse up or down, or by pressing the up or down arrow keys. In the case of EGA-HI (mode 16), you can choose from among 64 possibilities. In VGA modes, you can change the amounts of red, green and blue which make up the color.

If you start with any color and turn the red value all the way up, then turn the green all the way up, and finally turn the blue all the way up, you'll end up with white. If you turn all three values all the way down, you get black.

Click the left mouse button or press [Enter] to finalize a color and save its change into the script file.

CHOOSE COLOR -

Most drawing and text operations, as well as several special effects use the "current" color. If the current color is yellow, all text, drawing, etc will be made in yellow until the current color is changed. To change the current color, click on the color box in the top right corner of the main menu, or the color icon toward the top left of most sub-menus.

CHOOSE FONT -

TMW comes with many fonts which can be used by TITLES, REGULAR TEXT, LIVE TEXT, and BLOCK IMPORT. DEFAULT Font is built into the program. They are provided as *.CMF files on disk. You can use as many of the *.CMF files as you wish. When CHOOSE FONT is selected, it looks at the disk and directory containing TMW.EXE for the *.CMF files and shows those available. You can select any one for use. If you do use any besides DEFAULT Font, make sure to provide the corresponding *.CMF file on disk with your finished presentation.

To select a font, move the mouse up or down or use the up and down arrow keys. Press [Enter] or click the left mouse button when done.

NOTE: There is a very tiny font called BLOCK05.CMF. This font is the smallest one available and looks good only if all capital letters are used. Some of the lower case letters simply do not look good when drawn only 5 pixels high. Maximum string length for a line of regular text in TMW is 80 characters, but with this font, you could fit more than 80 characters in a single line across the screen. This must be avoided.

CIRCLES -

Circles are drawn in the same manner as rectangles, but you can't change the shape of a circle, only it's size. To change the size of a circle, move the mouse up or down while pressing the right mouse button, or toggle "Size Mode" with the [spacebar] and use the up or down arrow key. Return to "Move Mode" by pressing the spacebar again.

Circles can be canceled with [Esc].

If creating in Universal Mode, keep in mind that if a Universal Mode presentation is viewed on a Hercules-equipped system, the dimensions of circles will change in order to preserve the aspect ratio. You might rather use circular ELLITERS.

This function, found from the SFX icon on the main menu, clears the screen from left and right edges to the middle, changing the whole screen to the currently selected color. You will be asked to type a number representing the amount of time required for the curtains. 1 will make the fastest possible curtain close, while a large number like 20 will close slowly. Curtain effects run at nearly the same speed on different computers, but vary from one video mode to another.

CMEDIT - see LINE EDITOR

CMTEST - see QUESTION & ANSWER

CMPUZZLE - see PUZZLE

COORDINATES ON/OFF -

With this function, you can turn off the coordinate display in the upper right corner of the screen, so that you can work in the very upper right portion of the picture.

COPY BLOCK - (see also BLOCK MENU, MOVE BLOCK)

This function gives you a rectangle on screen. Move/size it to enclose an area to be copied and click the left mouse button or press [Enter]. When you move the mouse or press arrow keys, a flashing copy of the selected area will move across the screen. When satisfied with the new location, press [Enter] or click the left mouse button again.

In some video modes, especially $640 \times 480 \ 16$ -color, there is a limit to the size of block memory can hold. Normally, the computer will warn you when you try to move too large a block. In this case, you can move a large area a portion at a time.

CURRENT COLOR - see CHOOSE COLOR

CUSTOM DELAY -

This functions is found in the time menu, represented by the pocket watch icon on the main menu.

When this is selected, you are asked to enter a number of milliseconds to delay the development of the script. 1000 milliseconds = one second. The allowable range is 0 to approximately 64000. If you need more than 60 seconds delay, select this function several times in a row. For numbers larger than 3 digits, do not use commas.

CUSTOM SOUND - (see also MELODY)

Custom sound is found in the sound menu, represented by the cassette player icon on the main menu.

With this function, you can build your own sound effects, or create music if you don't know music notation. You can even build your own clip-sounds library, a collection of sounds which you can add to script files as you need them.

Sounds are created one note at a time.

You are first asked to enter a number representing a frequency. The acceptable range is 20 - 30000. Middle A is usually 440. The highest sound most people can hear is around 20000. Then you must enter a duration in milliseconds.

When entering numbers larger than 3 digits, do not use commas.

CUSTOM TOP BAR -

You can enter a line of text which will appear at the top of the screen in place of the standard menu bar or instructions. This will be overwritten as soon as the presentation returns to menu mode, or when Live Text or other function begins with it's own top bar information. However, you can use CUSTOM TOP BAR in combination with DELAY or WAIT FOR USER for specialized purposes.

DECRYPT SCORES - see also (OUESTION & ANSWER)

This is the built-in decoder software for CMTEST.EXE's Question & Answer sessions. (which see) There is also an DECODER.EXE module available which you can distribute to teachers with your finished products. CMTEST.EXE is included with the Professional Edition.

DEFINITE JUMP -

This causes a script file to call and run another script file. No matter where in the first file the DEFINITE JUMP is installed, it will wait until the entire first script is played first. However, it does not automatically wait for a user to press a key. Normally, you'll want to add a WAIT FOR USER or delay into your first script file at it's end.

As with some Hyper-links, a DEFINITE JUMP should be the last thing installed into a script file, since it will take TMW.EXE to a whole new script everytime it is played. This means you can't modify the original script file via TMW, once the DEFINITE JUMP is installed. The best way is to install it when all else is done, via TMW.EXE or the Line Editor or an ASCII file editor.

If a DEFINITE JUMP is installed at the beginning of a script file, then any Intelligence or Hyper-Link matches will take precedence over it. If a DEFINITE JUMP is the last line in a script file, then it will supersede all Intelligence and Hyper-Links.

DELAY: 5, 10, 20, 30, 50, 80 MILLISECONDS, 100, 200 MILLISECONDS, 1, 5 SECONDS -

As soon as you select any of these functions, located within the Time menu (stopwatch icon), a delay is written into the script file. 1000 milliseconds equals one second, so, for instance, 50 milliseconds is 1/20 of a second.

DOOR MENU -

This is a multi-faceted sub-menu containing TMW adjustments.

DOS WINDOW -

The DOS Window is represented by DOS on the main menu. This allows you to jump out of TMW and run another program, then return to exactly where you left off. This is useful to take a note when the phone rings, or switch to a calculator program, or jump into an ASCII editor to modify a script file.

To return, type EXIT at the DOS prompt.

If you do not have sufficient RAM, the DOS WINDOW request is ignored.

DOTTED LINES - (see also LINES)

Dotted lines are drawn in the exact same way as solid lines, which see.

ELLIPSE - (see also CIRCLE)

Ellipses are drawn in the same manner as circles (which see), except you can vary the height and width independently by moving the mouse while the right mouse button is pressed, or using the arrow keys by toggling "Size Mode" with the [spacebar].

EMPTY BOXES -

Using the mouse, hold down the right mouse button to change the size or shape of a rectangle, then click the left button when done. SIZE MODE can also be toggled with the spacebar.

Using the keyboard, click the spacebar to toggle SIZE MODE to change the size or shape of a rectangle, then click it again to return to MOVE MODE. Click [Enter] when done.

When SIZE MODE is toggled (with the spacebar or the right mouse button) the coordinate display in the lower left corner will reflect the dimensions of the rectangle.

Empty boxes can be canceled with [Esc].

ENCRYPT -

Script files and Live Text (ASCII) files can be encrypted so that no one can modify them. This protects your software so that end users cannot change your data and then pass modified copies to others. Encrypted files run exactly the same within TMW.EXE, TMWSHOW.EXE and CMTEST.EXE, but when examined with a word processing or text editing program, they are unreadable.

To encrypt, simply select this function from the OPT (Options) menu and follow the on-screen directions. Once a file is encrypted, it will still run fine with TMW but do not attempt to change it or modify it. The program will put unencrypted lines of text in a file which is being read as an encrypted file. The results would be unpredictable.

Because encryption is permanent, make back-ups of all your work before encrypting. The program does automatically make back-ups (with .BAK extension) when encrypting, but your .BAK files can easily be lost when working with files of the same first name, but differing extensions.

END LOOP - see LOOP

ERASE BLOCK - (see also BLOCK MENU)

With this function, found in the block sub-menu, a rectangle appears which you can size and shape in the usual way. When the left mouse button is clicked, or [Enter] is pressed, the area contained within the rectangle is replaced with solid color. The background color is assumed by checking the top left pixel within the rectangle and using it's color.

EXAMINE -

With this, you can view PCX or GIF files without incorporating them into your project. You'll find this useful for looking over large directories of clip art.

EXPANDING BOX - (see also SFX menu)

This function, found in the SFX, menu presents a rectangle on screen. Move and size it to indicate an area in which you want an EXPANDING BOX to grow. You will be asked to type a number representing the amount of time required for the effect. O will make the fastest possible expanding box, while a large number like 20 will work slowly. An expanding box will grow to the dimensions you have indicated in the currently selected color. EXPANDING BOXES run at nearly the same speed on different computers, but vary from one video mode to another.

FADE TO BLACK - (see also SFX Menu)

This function, found in the SFX sub-menu, fades the current picture to black. You will be asked to type a number representing milliseconds between steps. A small number (4 is a good, average number), is rather fast, but smooth. Larger numbers tend to fade in visible steps. This function works only in VGA, XGA and SVGA modes. For fades in CGA, EGA or Hercules, use GRANULAR FADE, below.

FILE MENU -

The functions within this sub-menu (second item on the main menu) pertain to file switching, directory switching and several miscellaneous file functions.

FILL -

With this, you can FILL an area in a picture with the currently selected color.

FILLs are tricky. Even one missing pixel in a border

will cause the FILL to leak out into the rest of the picture. Fills must not extend beyond the edge of the screen at any location or the computer may crash.

FILLED RECTANGLES - (see also EMPTY BOXES)

These are drawn just like empty boxes (which see) with the only difference being that the rectangles are entirely filled with current color.

FILL PAGE -

This function simply fills the whole screen with the currently selected color.

FLEXT-FONT -

Flexi-Font is an option which is included with the Professional Edition.

This font is a stroked character font, which can be adjusted for height, relative width, position, color and boldness. Using Flexi-Font, you can arrange text around circles, along curves, you can have text which starts large on the left and ends up small on the right, and you can make it fit exactly where you want it. You can even have it upside down if you wish.

When Flexi-Font, from the TITLES sub-menu within the TEXT sub-menu, you must pick a location with the on-screen arrow for placement of a line of text. Then type the text. It is ok if the location, angle, or size of the text are incorrect. You will be offered a menu when done typing with which you can change all aspects of your text.

From this menu you can then change the color, height, width, angle and position of the line of text. You can even edit the line. When satisfied, select DONE from the Flexi-Font menu. You will be given an option to accept or abandon the text.

To fit Flexi-Font text around a circle or along a curve, do it letter by letter, arranging each so that it lines up the way you want.

The program FLEXFONT.EXE must be distributed along with your final product files.

FLIP BLOCK -

With this function, located within the BLOCKS sub-menu, you move/size/shape a rectangle to enclose an area. Then the area will be reversed from left to right. This is useful in making symmetrical images. For instance, if you want to draw the classic heart shape, you can make the left side, make a copy of it a few inches to the right, flip the right side image, then move it back to match the left image. This function requires quite a bit of RAM, so in certain video modes, if you select a large block, you may not be able to complete the operation.

FREEHAND - (see also FREEHAND)

With this function, you can move the mouse or use the arrow keys to draw freehand lines as if you were drawing with a pen.

With a mouse, hold the left button to start drawing, and let it go when you want to move the arrow to another location or quit drawing. When done, click the right button.

From the keyboard, press the spacebar to start drawing, and press it again if you want to move the arrow or quit drawing. When done, press [Esc].

FREEHAND requires lots of disk space, so use this function sparingly in large presentations. In .PCX files, lots of vertical lines make the file larger, but horizontal lines have little effect on file size. In ASCII-Vector-Graphics, lines in any direction swell file size.

GET OUT NOW -

There is a rare situation in which TMWSHOW.EXE can be run

in batch mode to play a single script file, which contains a user input feature such as Live Text. When the user is done with the file, it does not drop out directly to DOS, but first displays a blank screen. To get an immediate return to DOS when [Esc] or the right mouse button is pressed, select this option. GET OUT NOW can be installed at any place in the script file. This has no effect in TMW.EXE, CMTEST.EXE or in TMWSHOW.EXE when used in presentation mode.

GRAB PROGRAM -

This puts a line in the script file which runs any standard .BAT, .COM or .EXE file. The screen is erased and the video mode is temporarily restored to text mode, the hooked program is run, then the current video mode is reset. What ever was on screen before the program was run will be erased. Because some RAM is required to keep TMW.EXE or TMWSHOW.EXE in the background, executable programs which require lots of memory may not work properly.

GRANULAR FADE -

This function installs a pseudo fade out into your script. The granular fade will cause the whole screen to become the current drawing color. So if you first change the color to green, the fade will fade out to green. The granular fade can be quite pretty.

Although most other functions within TMW are computer speed independent, granular fades will run at different speeds on different machines. In fact, it takes about 6 times longer for a fade to occur on a 4.77 mhz XT-class computer than a 33 mhz '486. Therefore the granular fade will appear quickly on a fast computer, and take somewhat longer on slow machines, but overall, the effect is pleasant on all computers.

GRID -

A grid is a pattern of evenly spaced dots or lines which are temporarily layered over your picture. This helps in precise alignment of picture elements or animations. The GRID is not visible in the finished product when presented with TMWSHOW.EXE.

GRID DIMENSIONS -

This menu item allows you to control the spacing of the grid. You can independently set the vertical and horizontal space between grid elements.

GRID COLOR -

With this, you can control which color the grid uses. Otherwise, a white grid over a white background would be as useless as a black grid over a black background.

GRID LINES OR DOTS -

With this menu item, you can switch between a grid of dots or lines. $% \left\{ 1,2,\ldots,4\right\}$

GRID MENU -

The Grid sub-menu contains the above grid controls.

HELP -

The help system and the the OWNER'S MANUAL are one and the same, consisting of over 200,000 bytes of text files presented with a small program called MANUAL.EXE. (not in shareware version) TMW has been designed so that when you need help, everything is available. In addition to access of the complete documentation from this menu item, you can access the same files by pressing [F1] or selecting HELP from most sub-menus or selecting HELP from the main program.

HELP LEVEL -

This provides a slider that you can move from 0 to 100 indicating the level of help you want. At 100, all help is

always available, but may slow you down a bit by providing information that you already know. At 0, very little extra help appears, most hint bars are not displayed, and many messages are shortened. The default setting is 100, but as you learn to use TMW, you may want to gradually lower the help level.

HIDDEN NOTE -

Use this to create a note in the script file which will never appear on screen.

This is useful if you edit your script file with a text editor or the Line Editor. For instance, let's say you are in the middle of a complex picture and want to create a hand. Perhaps you are concerned that the hand won't come out right on your first try. You could do this:

Select HIDDEN NOTE from the TEXT sub-menu and write: "Hand starts here." Then draw your hand. If it is not correct, use the text editor and find the note, "Hand starts here." Delete everything south of that note, save the file, and try drawing the hand again.

Another interesting use for HIDDEN NOTE is to embed keywords for a SEARCH. TMWSHOW.EXE, when in Presentation Mode, has a SEARCH feature. When the user selects SEARCH, any script file in the presentation containing something matching the user's request will be displayed. Normally, this would be used for pictures showing text. But what if the user types "elephant," hoping to find the unlabeled picture of a elephant? If you embed the word "elephant" in that file with Hidden Note, the picture will be displayed upon a SEARCH request.

HINT BAR - (see also CUSTOM HINT BAR)

With this function, you can turn off the top hint/menu bar so that you can work on the very top area of a picture. This has no effect when the main menu bar is displayed, but otherwise, there is no top bar, and you have freedom to work to the top of the screen.

HOLD ENDING -

There are times when you might not want the Another Company copyright notice at the end of an TMWSHOW.EXE presentation. We have another, invisible copyright notice buried in the .EXE file, so you can turn it off with this function. Use this function once, anywhere within any script in your presentation, and the copyright notice will not appear.

HOOK (DISPLAY) GIF -

This works exactly like the HOOK .PCX FILE function (which see), except that it is for .GIF files. These were originally created for use on Compuserve, but have become generally popular. Their biggest advantage is in crossing platforms. Technically, a .GIF file can be displayed on a MAC, An Amiga, an IBM or any other common computer. However, in implementation, this interchangeability depends on information coded into the specific .GIF file, such as as overall size and number of colors.

.GIF files use the same compression technique as PKZIP or LHARC, so they are already smaller than .PCX files but cannot be compressed further. However, .PCX files use a different compression algorythm, so can still be compressed even smaller (in some cases) than .GIF files. If you are going to compress your whole presentation, .PCX files may take up a bit less room on disk. In the case of an uncompressed presentation, .GIF files are smaller.

.GIF files have more flexibility than .PCX files, and there are a few variations of .GIF files which TMW does not implement. It will only display the upper left corner of larger than full-screen size images, it will only display the first image in multiple-image single files, and it will not display .GIF files in Hercules or CGA modes.

.GIF files take longer to appear on-screen than .PCX files.

HOOK (DISPLAY) PCX -

.PCX is an extension given to the most common type of "bitmap" graphics image files. These are stored on disk as a compressed recording of the color at each dot location on the screen. Sometimes this is more efficient than TMW's ASCII-Vector-Graphics which stores a picture as a bunch of text codes representing drawing "primitives," but of course, bitmapping doesn't allow for including information for sound effects, animations, and timings.

This function will put a line in your script file calling on TMW or TMWSHOW.EXE to display a chosen .PCX file. Once displayed, you can continue to draw over the .PCX image, add sounds, animations, etc.

Although the .PCX format specifications are very loose, and interpreted differently by various programs which create them, TMW can handle most .PCX files.

Ideally, a .PCX file which you choose to display will match the current script file video mode. If it doesn't match, the program can still display it, but it will do it by automatically switching to the correct video mode. This means that if you display a mis-matched .PCX file, it will first erase the current screen. Normally this works fine, since most scripts start with the .PCX picture, or the .PCX picture is full-size and overwrites everything on the screen anyway.

If you have turned OVERRIDE on, you are asked whether you want to use "automode" or not. If you choose automode, the .PCX file is allowed to change the current video mode. This means that if you use a high-resolution monochrome CGA .PCX file, but your script starts out in low-res VGA 256-color, the video mode will be changed so that your whole .PCX image will be visible and in proportion. There are times when you might not want automode. Some .PCX files will display in your current video mode just fine, but would change the video mode to something you don't want for the rest of the current script. So, select automode unless you know you must preserve the current video mode. When using less than full-size .PCX images, because using automode may blank the screen if the video mode doesn't match, you may want to make sure NOT to use automode.

With OVERRIDE on, you are also asked whether you want to use the color palette information included in the .PCX file or use the default colors. Normally you would choose to use the included colors, since the defaults may look unusual. However, there are times when the original picture was created using terrible or unfunctional colors. In such a case, you can use the defaults. Either way, you can manually change individual colors by using Change Palette from the SET sub-menu.

If the .PCX file is less than full-screen size, a rectangle will appear on your current picture. You cannot change the size and shape of the rectangle, because it represents the exact size of the .PCX image. But you can move it to the location in which you want the image to appear. Click a mouse button or press [Enter] when the rectangle indicates where you want the .PCX image to appear.

HOOKS MENU -

Hooks are links to other files on disk. You can hook programs (.EXE, .COM & .BAT), graphics (.GIF & .PCX), sounds and other script files into your presentations.

HOOK SUB-FILE -

When you want to do the same thing in several script files, you can save disk space by putting the sub-routine in a separate script file of it's own, then selecting HOOK SUB-FILE. This will cause the main script file to run the sub-file, then resume where it left off.

Be aware that settings changed by one file will affect another when they are hooked together. In other words, if your sub-file has some rectangles, originally drawn in the thinnest line thickness and in red, but the main file is using a larger thickness and yellow when the sub-file is called, unless the sub-file contains specific calls to make sure the lines are thin and red, they'll end up thick and yellow. Make sense? (Not to me, and I wrote it!)

HYPER-LINK -

This is a very powerful function! You can sensitize up to 50 areas in a picture, so that if an end user moves the arrow into one of those areas and clicks the left button or presses [Enter], the presentation will jump to another pre-selected script file. This means that you can have a picture containing several icons or boxes, each of which indicates, "Click here to xxx." No longer are documents required to be linear! The end users can go in any direction they wish. Any picture can be a menu leading to other pictures or even more menus.

To build a Hyper-Link, you are first asked to shape and size a rectangle and move it to enclose the portion of the picture you want to sensitize. Then you are asked to name the file which will play if that area is selected. The file can be a script file, or an executable .EXE, .COM or .BAT file. (although using only script files is recommended)

Each hyper-linked script file can have up to 50 hyper-links, however hyper-link memory is shared with Intelligence (Character mode) memory, so if you have 9, Intelligence character links, you can only have 41 hyper-links.

Hyper-Link is powerful, and therefore tricky. You can easily lose track of the flow or directions in which a presentation may travel, leaving the user with no way to return to a basic level, or jump to the wrong files, confusing the user.

If the user clicks where two sensitized areas overlap, the last one added to the script file is the one which will take effect.

What if the user clicks on an area you have not sensitized? If the runtime program TMWSHOW.EXE detects that there is at least one hyperlink in a script file, it will provide the on-screen arrow until a link has been selected. However, TMW.EXE, the creation program, handles this a bit differently. Because you are creating the script file, we cannot have it wait for you to select a link, since then you could never add more to the file. Within TMW.EXE, if you click on an area which does not contain a link, then the program immediately returns control to you.

Because of this small difference, you should test your hyperlinked presentations in ${\tt TMWSHOW.EXE}$ after creation with ${\tt TMW.EXE.}$

There is a special feature in the SFX menu for use with Hyper-Link called PERSISTENCE, which allows for an activated hyper-link to change only a portion of the current picture. Specifically, PERSISTENCE prevents the currently displayed picture from being erased when the next script file is started.

Another feature in the SFX menu is DEFINITE JUMP. Use this to cause a hyper-linked script to return back to the script which called it. For instance: If you start with a catalog menu showing 12 products, you would then have 12 hyper-linked scripts, one showing each product in detail. Then, at the end of each of these product scripts, you install a DEFINITE JUMP, back to the catalog menu, so the customers can then examine the other hyper-linked scripts.

It is recommended that you put some simple instructions on hyper-link screens to this effect: "Click here for...," so that users will know what to do.

What do you do if you want to have a way to stop a fully-linked presentation if a user selects something like:

"Click here to Quit"? We have made a provision. Sensitize the area by selecting Hyper-Link as usual, but when asked for a filename, type STOP, in capital letters. When this hyper-Link is selected by the end user, the presentation will end and return to DOS. Alternatively, you can have one last script file, perhaps containing a "thank you" or "goodbye" message - or catalog. This last script file would not contain a DEFINITE JUMP back to the menu script.

For more information about Hyper-linking, see the HYPERLINK chapter (HLINK.DOC). Also see Intelligence (INTLGNCE.DOC), since it is a closely related system.

IMPORT TEXT -

This sub-menu offers several ways to incorporate normal ASCII text files into your presentations.

INTELLIGENCE -

For information about the Intelligence functions, see INTELLIGENCE on the main HELP menu, or view INTLGNCE.DOC with your favorite text viewing program.

JUSTIFY (TEXT) - see also (REGULAR TEXT)

You can choose right justification for use with REGULAR TEXT. Right justification puts extra spaces between words so that the right-most character in each line of text aligns with the right-hand edge of the text area.

LAYER - (see also REMOVE LAYERS)

Use this to create templates for precise alignment of animations or picture elements. A file can be made which continues outlines showing you where you want things to line up. You can double-expose this "template" file over your current file, add your picture elements precisely over the outlines.

LAYER MENU -

This sub-menu within the FILE sub-menu, contains two functions: LAYER and REMOVE LAYERS (which see).

LEFT TITLE -

This is just like CENTERED TITLE (which see), but this one starts the text at the arrow and builds a line of text to the right, centered vertically at the arrow.

LINES - (see also DOTTED LINES, FREEHAND)

Use this function to draw straight lines.

If using a mouse, click the left button to start a line, then click the left mouse button again to 'set' the line, or click the right button to cancel the line. When done with LINE, click the right mouse button again.

If using the keyboard, use the [Enter] key to simulate the left mouse button and the [Esc] key to simulate the right mouse button.

When using the mouse or the keyboard, it might be desirable to float a partially completed line to a new location. You can toggle FLOAT MODE by clicking the spacebar. Then click the spacebar again to return to STANDARD MODE.

This can lead to confusion. If a line misbehaves, try clicking the spacebar to toggle to STANDARD MODE.

If you have a three-button mouse, you can hold the center button to toggle FLOAT MODE.

LINE EDITOR -

The Line Editor is a separate option, included with $\ensuremath{\mathsf{TMW}}$ Professional Edition.

With the Line Editor, you can fine tune and troubleshoot your script files, line by line, and change the lines to suit your needs. You can edit a line, and see its effect on your finished product immediately. You can go to any line, and see it's graphic effect while you edit it. A few TMW

functions are not fully supported by the LINE EDITOR, such as ANIMATE (Block Animate) and HOOK SUB-FILE.

This requires knowledge of the ASCII-Vector-Graphics codes which can be found in the Editing Script Files chapter.

The LINE EDITOR contains a menu of functions which are mostly straight-forward, including FORWARD, BACK and ESC. Additionally the LINE EDITOR menu contains:

To stop the Line Editor and return to the main menu, click on the close box near the top, on the right side of the Line Editor menu.

LINE EDITOR - AGAIN -

To rewind the script file to the beginning.

LINE EDITOR - END -

To go directly to the end of the script file.

LINE EDITOR - SPEED -

You can advance through a script in slow motion, to watch problems develop at a viewable speed.

LINE EDITOR - GOTO -

To go to a script file line by number - for instance to go to the 100th line in the file and stop for editing, etc.

LINE EDITOR - CHANGE -

To edit the current line.

LINE EDITOR - INSERT -

To insert a new line into the script file.

LINE EDITOR - DELETE -

To delete the current line in the script file.

LINE EDITOR - X-PLAIN -

This function attaches a very short explanation to the end of each line when visible on the monitor. For instance,

C100 100 20

becomes:

C100 100 20 - circle

LINE EDITOR - TIMING -

You have an option to allow or disallow the LINE EDITOR to delay for periods of time specified by the script file. This will eliminate sound effects, animation delays and WAIT FOR USERs, for the duration of the editing session.

LINE EDITOR - PLACE -

This will place the blue bar showing the current script file line at either the top or the bottom of the screen, so that you can edit items at the very top or bottom without interference.

LINE EDITOR - Q-MENU -

This temporarily eliminates the MENU, leaving the mouse and arrow keys available to go forward or backward through the script file, and spacebar to toggle CHANGE (edit) mode. Press [Esc] or any other non-functional key to return to menu.

LINES / DOTS - see GRID LINES OR DOTS

LINE THICKNESS -

You can control the thickness of lines used in rectangles, lines, dotted lines, circles, ellipses and freehand with this feature. Move mouse up or down or use up/down arrow keys. Press [Enter] or click left mouse button to finalize. Line thickness will remain in effect until you change to another

script file, reselect LINE THICKNESS, or end the program.

LINKS MENU -

This gives you access to the HYPER-LINK and related functions. Hyper-Linking is the process in which end users can move an arrow to indicate anything you have drawn or written on the screen. When the users press [Enter] or click the left mouse button, the presentation switches to another script.

LIVE TEXT - (see also AUTOMATED LIVE TEXT)

This is a really neat feature of TMW. You can design a script file so that somewhere in your picture you have some lines of text which are scrollable, just like as if you were using Writer's Dream, See, List, View, or any other text presentation program. The difference is that you can do it as any size portion of a graphics screen, and using any font or color!

This hooks any ordinary ASCII text file. So, first create a text file that you want displayed. Then, from within in TMW, select a font and color, then choose this function. You will be asked to size and shape a rectangle to define the area you want the text to occupy. Then, name the file you want displayed. You are also presented with two other choices:

You can have AutoScroll start automatically. AutoScroll causes the text to scroll line-by-line without the user pressing any keys. Autoscroll can be run at any one of nine speeds. 1 is very slow, allowing approximately 2 seconds between lines. 9 is very fast. AutoScroll's speed changes if the user presses any key from 1 to 9, and stops if any other key is pressed. Whether or not AutoScroll starts automatically, it can be started or stopped while Live Text is in effect. If AutoScroll continues to the end of the text file, Live Text quits automatically.

The last option is a "hint bar." Live Text will give the end user a bar at the top of the screen, indicating that the user can use the arrow keys to scroll, press [F1] for on-line help, or press [Esc] to quit Live Text. If you do not select this option, it is usually a good idea to write your own brief instructions into the picture so that the users know how to use Live Text.

Live Text also has a built-in SEARCH function. When a user presses [S] (for Search) or [F] (for Find), they will be prompted to type a word or phrase. If that word or phrase is in your text file, it will be located and highlighted.

End users who try SEARCH from the TMWSHOW menu will be pleased to find that SEARCH will extend into hooked LIVE TEXT files, and take them to the script file and the portion of the live text file containing a match.

Live Text can also be scrolled by moving the mouse up or down. The left mouse button has no effect, but the right button will end the Live Text session, just as if [Esc] were pressed.

Live Text has a print function. The end user can press [P] from the keyboard to get a paper copy.

The ASCII files used with Live Text must be provided with your finished product disks.

LOOP -

You can cause a portion of your script file to play over and over again, until the user clicks a mouse button or presses any key. This is simply done by selecting this option. When the 'l' which this writes to the script file is encountered, the program rewinds to the last 'b' (breathe in) encountered, or back 16,384 bytes if there is no 'b', or to the beginning of the script file. Then it plays to the 'l' again, and so on.

LOOPing is tricky. For instance, if you create an animation which ends at a different place than where it started, and then loop your sequence, it will be different the second time around than the first. Practice will show the fine points of working with looping.

Looping will not through run sub-files, executables, hyper-links, intelligence links or definite jumps.

LOOP MENU - (see also LOOP)

The Loop Menu is a sub-menu which contains two functions: BEGIN LOOP and END LOOP (see LOOP)

MAKE PCX/GIF -

Whatever is currently displayed on the screen will be made into a .PCX or .GIF file when this is selected from within the BITMAP sub-menu (picture icon, top row, third from left). Of course, the top menu bar will not become part of the file. With this option, you can convert ASCII-Vector-Graphics images to a bitmap format used by other programs. This way, you can incorporate images created with TMW into your desktop publishing, send them to your printer, modify them with paint programs, etc. Also, a complex ASCII-Vector-Graphics image may end up smaller and display more quickly if converted to .PCX or .GIF format.

You will be asked to type a filename. If you type a name that already exists, the current file will be overwritten with the new information. If you type a file ending in .GIF, then a .GIF file will be created, and of course the .PCX suffix will create a .PCX file. Using any other suffix would create unusable files.

You can make full-screen or partial .PCX/.GIF files. A pop-up box asks you to type F for a full-screen save, or P for a partial save. If you select partial, then a rectangle appears on the screen. Size/shape it to enclose the area you want to save. This small cut can then be added to other scripts, so that you can sprinkle photographic quality images throughout your presentations while using a minimum of disk space.

MELODY -

When MELODY is selected from within the SOUND sub-menu, a graphical menu pops up. It allows you to compose melodies using standard music notation. You can pick any note (representing timing) from the lower staff, and move it to the upper staff in a position corresponding to the frequency of the note. You can add as many notes to the top staff as you like up to 2000. You can also select rests and naturals, flats and sharps. If you put flats or sharps at the very beginning, then all notes on the same lines or spaces will be flat or sharp unless specifically changed by a natural sign. Any flat, sharp or natural after the very beginning will affect all subsequent notes of that tone, until another flat, sharp or natural sign is encountered on the same line or space. This is a slight variation from standard music notation, but is necessary, since the program does not show measures.

You can move the pointer to the area marked, "Click here for menu" and will be offered several other choices including preview, deleting notes, changing the attacks and the tempo. For more information, press the [F1] key at any time for pop-up help.

Melody has a limit of 2000 notes. If you ever manage to reach this limit, you will be notified. However, if you are creating a long song, you should save it and work on it in pieces, since MELODY does not write to disk each time you add a note, but saves it all in RAM until you EXIT & SAVE.

MERGE A FILE -

MERGE A FILE is located in the FILE sub-menu. This combines two or more files into one. This is very useful for working with collections of clip-art or clip-sounds. In other words, let's say you are making a presentation about cattle: You can pre-create several different pictures of cows, then easily "draw" complicated pictures by merely adding several cow pictures to each of your main script files.

You can add files which are created in the same video mode without any trouble, but ones of differing video modes may clash. If you want to merge files of differing video modes, as soon as the second one begins to play, everything currently on the screen will be erased. This can be avoided by deleting the 'mode' line at the start of the second file before it is merged, however, whatever graphics you have used must be compatible with the overall video mode.

MISC MENU -

This sub-menu contains several functions not easily classified elsewhere such as Spraypaint controls.

MODIFY 1 COLOR -

This function, found in the COLORS sub-menu, works for VGA, XGA and Super-VGA modes. When selected, you are offered a choice of picking a color from the color menu, or moving the arrow on the picture to point to an item of a chosen color and pressing [Enter] or the left mouse button.

When a color is selected, you are given 3 sliders which you can move to adjust the amount of red, green and blue in the color. The amount of each of these primaries can range from 0 to 63 parts. Any color can be changed to any other within the overall range of 64 cubed, or 262,144 possibilities.

To move a slider with the mouse, point to it, then hold the left mouse button down while dragging it to a new location.

To move a slider with the keyboard, move the arrow to where you want the slider to be, then press [Enter].

MODIFY PALETTE -

This function, found within the COLORS sub-menu, works for VGA, XGA and Super-VGA modes, and will affect the overall flavor of the on-screen image. You can adjust the contrast, brightness and hues. The 5 sliders are moved just like the sliders in MODIFY 1 COLOR above.

When done making modifications, you will be asked to create a new full-screen .PCX or .GIF file to contain your modified picture, since nothing is written into the current script file. Therefore, the best way to work with overall color modifications is to then link the newly created .PCX or .GIF into an otherwise blank script.

MOVE BLOCK - (see also COPY BLOCK, ZOOM BLOCK)

This function, found in the BLOCKS sub-menu, works just like COPY BLOCK (which see), but the original area disappears, leaving background color.

Specifically, the computer guesses the overall background color you want by assuming it will be the same as the color of the pixel located one pixel to the right of, and one below the upper left corner of the chosen area.

NOISE -

NOISE, located within the SOUND sub-menu, creates a general cacaphony. You are asked to type an amount of time in milliseconds. One second = 1000 milliseconds. The range is 0 to 30000. If you need more time, choose NOISE several times in a row. If entering an amount of time larger than 3 digits, do not use a comma.

NOTE - see HIDDEN NOTE

O-EFFECTS -

This will present a sub-menu within the SFX sub-menu, with which you can create various simple video special

effects including Slant, Diamonds, Expansion, Blocks, Rainbow, 1 & 4 color slides, Nova, Roller, Lava Flow and Fingers. For more information, see the chapter, "Optional Special Effects" contained in OFX.DOC. O-EFFECTS is included with TMW Professional Edition.

OPEN CURTAINS -

This function, found in the SFX sub-menu, clears the screen from the middle to the right and left edges, changing the whole screen to the currently selected color. You will be asked to type a number representing the amount of time required for the curtains. 1 will make the fastest possible curtain opening, while a large number like 20 will open slowly. Curtain effects run at nearly the same speed on different computers, but vary from one video mode to another.

OPTIMIZE -

This option may make the current script file smaller and run faster. It does this by eliminating redundant lines such as blank lines, calls to change color or thickness to the current color or thickness, and by removing markers used by UNDO. Use Optimize as one of the finishing touches to a script file, since UNDO will run less efficiently after OPTIMIZE is selected.

OPTIONS MENU -

This sub-menu contains access to several TMW separate purchase options. Most are not supplied with TMW Standard Edition, but come with the Professional Edition.

OVERRIDE -

When this menu box is checked, you are asked additional questions upon selection of several menu items, which give you greater control over TMW, but also greater complexity. For instance, you can control whether or not .PCX files use their built-in palette, or use the current video palette. You are asked to select a video mode every time a new script file is created.

OWNER'S MANUAL - see HELP

PC SPEECH -

The PC SPEECH sub-menu is located within the SOUND menu, represented by the cassette player icon on the main menu.

Good, intelligible-quality speech is possible from most standard IBM-PC speakers! TMW provides two systems which present digitized speech. The first uses stand-alone .EXE files which speak by themselves. The second system uses a sub-program called PC-TALK.EXE which plays .SP files. (These are not included in the shareware edition.)

PERSISTENCE -

This function installs a code in your script file, so that screen will not clear when the next script file is played. This give a double-exposure effect. A useful example would be: A box in the middle of a complex screen in which you want to change the contents, without recreating the screen that surrounds it.

PICK UP COLOR -

When this function within the Colors sub-menu is selected, an arrow appears on the screen. Move it to point to anything on the screen containing the color which you would like to become the current color and press [Enter] or the left mouse button. From this point forward, text, drawing items and special effects will use the color you have selected.

PIXEL EDIT -

When this function is selected, a rectangle appears on screen. It's size cannot be changed, but you can move it to

surround an area you want to work on in close detail.

Move the rectangle to the area you want to edit and press [Enter] or click the left mouse button. Then the original area will be pictured in it's normal size in the upper left corner, and the rest of the screen will be a very blown up version. You can point to any enlarged pixel and click the left mouse button or press [Enter] to change it's color to the current drawing color. Press [Esc] or click the right mouse button when done.

To change many pixels to a new color, toggle ${\tt GO}$ ${\tt MODE}$ with the spacebar.

To change to another color, press the [C] key.
Once a pixel has been changed, you cannot immediately change it again. Another pixel must be changed first, even if you have pressed [c] to change color. This prevents runaway iterations of changing a pixel to the same color over and over again if you move the mouse slowly and therefore saves disk space. PIXEL EDIT is disk space-intensive and should be used sparingly, especially in ASCII-Vector-Graphics scripts. If converted to .PCX image, extensive PIXEL EDITing will usually not affect file size as much.

POP-UP COLORS -

This sub-menu, nested within the Colors sub-menu, controls the background and text colors of pop-up dialog, help and sub-menu boxes in TMW, TMWSHOW and CMTEST.

POP-UP COLORS - RESTORE DEFAULTS -

This function makes menu backgrounds white, and foregrounds (text) black, unless the colors have been locally remapped by a .GIF or .PCX image. In the PRESENTATION MODE menu, the colors are reversed, so that the background will be black and the text white.

RESTORE DEFAULTS is temporary, unless you then select SAVE TO INI FILE or SAVE TO SCRIPT FILE to record the default colors.

POP-UP COLORS - BACKGROUND -

The default background color for menus and pop-ups is white, and in the PRESENTATION MODE menu, the BACKGROUND color actually affects the text. The default is white, or color #15 in 2-16 color video modes, or color #255 in 256 color modes. Occasionally, this may be changed from white by .PCX or .GIF images which remap color #15 or #255, or by manually changing the color from the ADV COLOR MENU.

POP-UP COLORS - FOREGROUND -

The default foreground color for menus and pop-ups is black, and in the PRESENTATION MODE menu, the FOREGROUND color actually affects the background, since PRESENTATION MODE uses reversed menu colors. Using color #0, it is usually black unless changed.

POP-UP COLORS - SAVE TO INI FILE -

Changing a pop-up color is only effective within the current script during the current session, unless you record your change to the INI file or to the script file. Saving to the INI file means that the colors you have chosen will be the ones used every time TMW is started, unless you change them again, or they are overridden by pop-up colors recorded in a script file. The INI file is called CM.INI on disk. Although the CM.INI file is ASCII and commented, directly editing the CM.INI file is not recommended.

NOTE: If you use colors beyond #15 in a 256-color video mode, then switch to a script with 16 or fewer colors, your selection will be ignored and the menus will be black and white.

POP-UP COLORS - SAVE TO SCRIPT FILE -

Saving the current pop-up colors to a script file means that the each time that script is run, the pop-ups will take

on the colors recorded in that file. This overrides pop-up color information in the CM.INI file. See the above paragraphs for more information.

PRESETS - ADJUST PRESET -

With this function, located within the TIME menu, you can select a number of milliseconds for Use Preset Delay. The number you have selected remains in effect until you again select ADJUST PRESET.

PRESETS - USE PRESET [I-P-P]

If ADJUST PRESET has been previously selected from this menu, when USE PRESET is selected, a delay of the amount of time you specified will be added to the script file. For instance, you can specify 15 milliseconds, then make a small block move, select Use PRESET, make another small block move, select USE PRESET again, and so on. Then you'll end up with smooth animation that waits 15 milliseconds between steps.

PUZZLE -

 ${\tt CMPUZZLE.EXE}$ is an option supplied with the Professional Edition.

The Picture Puzzle Module can take any on-screen image file and turn it into a live, on-screen puzzle composed of 32 random pieces. The end user can reassemble the picture with the mouse or arrow keys. This is easy, and fun. You'll find yourself playing with it for hours!

If you make a presentation including Puzzle, then you must include CMPUZZLE.EXE with your finished product files.

QUESTION & ANSWER -

 ${\tt CMTEST.EXE}$ is an option supplied with the Professional Edition.

You can create full-fledged multimedia multiple-choice or true/false tests with TMW! These tests have the capability of hyperlinking files to each question depending on whether the students answer correctly or incorrectly. Furthermore, the test records the scores to disk in an encrypted file. This file can be decrypted into an ordinary ASCII file by the teacher (with the decoder software which we provide), but it cannot be tampered with successfully by students. This makes completely honest home study possible! The teacher can design the test so that the running score and the final scores are visible or hidden from students. A test can be composed of any number of questions from 1 to 100. The answer to each question is recorded, as well as running score (correct out of total number of questions) and percentage of correct answers. It's all done automatically!

QUESTION & ANSWER is found within the OPT (Options) sub-menu.

RECTANGLES - see EMPTY BOXES, FILLED RECTANGLES

REGULAR TEXT -

When this function, within the TEXT sub-menu, is selected, a rectangle appears on screen. You can change it's size and shape by holding the right mouse button or by toggling SIZE MODE with the spacebar. Move it to the desired location and press [Enter] or click the left mouse button.

Once the text area is selected, you can simply type text. Word wrap is automatic when you reach the right hand edge of the chosen text area. You can use the backspace key for deleting mistakes. Press [Esc] when done entering text.

If JUSTIFY (text) is ON, then extra spaces will be put between words so that the last character in each line is against the right edge of the text area.

If you try to select an area smaller than 2 characters wide or one character tall in the current font, the function will cancel and return you to the main menu.

You can, of course, select an area larger than you need.

REMOVE LAYERS - (see also LAYER)

This function will delete all layered files from within your current script file, thereby eliminating temporary templates, etc.

RESET PALETTE -

If you have manually changed palette colors, or have imported a .GIF or .PCX image which has changed the default colors, but you want them back, this puts a line in the script file which will cause the colors to return to normal.

SET SHADOW - (see also FLEXIFONT, CENTERED TITLE, LEFT TITLE)
This sub-menu is for controling on-screen shadows cast by
CENTERED TITLE, LEFT TITLE, and FLEXI-FONT (an option).

SET SHADOW - SHADOW COLOR -

The default shadow color is black, but can be changed to any color you wish. The standard colors menu appears, but this is for selecting Shadow Color only, and does not affect the main drawing color.

SET SHADOW - HORIZONTAL - This is just like VERTICAL, below.

SET SHADOW - SHADOW ON/OFF -

SET SHADOW - SHADOW SIDE -

When set to right (default) the shadow will occur to the right of the text, as if the light source was over your left shoulder.

SET SHADOW - VERTICAL -

You can control the offset of the shadow in the vertical dimension. If you select a vertical offset of 2, then the shadow occurs two pixels lower than the main text. The most common selection is 1, but a range of 0 to 20 will work.

THE SFX (Special Effects) MENU This sub-menu is for special effects.

SHOW ICONS -

When this box is unchecked, most of the icons on the sub-menus disappear, leaving text-only descriptions. This makes the menus faster, but less colorful, and makes items harder to find for beginners. SHOW ICONS has no effect upon the main menu.

SILENCE -

SILENCE, within the SOUND sub-menu, asks you to enter an amount of time in milliseconds. 1000 milliseconds = one second. The allowable range is 1 to 30000 milliseconds. If you need more than 1/2 minute of silence, select SILENCE several times in a row.

SOUND LIBRARY -

This is a top level menu to the Sound Effects Library.

SOUND LIBRARY - SOUND LIBRARY -

This is a menu of pre-created sound effects which will play on all ordinary computers (Sound Blaster not required).

SOUND LIBRARY - SOUND LIBRARY - PINK, LIQUID, WIND UP, WIND DOWN, BUGLE, SORRY, FREEFALL, TWINKLE, BIRD CALL -

These are pre-made sound effects. You can hear them merely by selecting them from the menu. You are asked if you want to "accept" them. If you answer [y] or click the left mouse button, the sound effect is added to the script file. Some ask you to enter a time in milliseconds for

length of play. One thousand milliseconds = one second. The acceptable range is 1 to 30000 milliseconds. If you need more time than 1/2 minute, select the same sound effect several times.

SOUND - AUTO SOUND -

This item runs a small program packaged with TMW called AUTOSND.EXE, which will run your sound card support files on a sound card if one is found in end users' systems, but will run .EXE or .SP sound files on the PC speaker if a sound card is not available. This is not included in the shareware edition.

SOUND CARD -

This menu contains accesses to optional hardware sound card programs.

SOUND CARD - SOUND BLASTER VPLAY -

TMW now supports standard Sound Blaster .VOC files which you can create if you have a Sound Blaster card. These are generally used for synthesized speech, but may also be used for excellent, multi-instrument music and sound effects. A Sound Blaster card is required to replay these sounds. If attempted on a computer without a Sound Blaster card, nothing will happen. To use this function, simply type the name of the .VOC file you want played.

The .VOC file must be copied along with your script files onto your finish product disks. The end-users' computers must have have a path to VPLAY.EXE, which comes with the Sound Blaster card.

SOUND CARD - OTHER SOUND CARD -

With this function, you can run most sound programs for sound cards other than Sound Blaster, as well as other programs for the Sound Blaster card. It simply puts a sort of hook into the script file, which will run the program of your choice, along with the parameters of your choice. The picture being developed by your script is unaffected, unless the sound program tries to write to the screen. Most sound programs have a way to prevent this, such as passing a "/q" as a parameter along with the sound file to play.

This function will ask for a program name, a sound file name, and finally ask whether you want to add parameters. For instance, let's say that you have a program called SOUND.EXE which plays a bit of music in a file called GUITAR.XXX. Furthermore, we'll imagine that SOUND.EXE can take /n to make sure it does not upset the current screen. You'd enter SOUND.EXE for a program name, then GUITAR.XXX for the sound file name, and finally /n as a parameter. That ought to do it!

Interestingly, you can use this function for programs other than sound programs. If you have any .EXE, or .COM file that does not write to the screen while it operates, you can hook it into your script here.

SOUND MENU - (see also SPEECH, AUTO SOUND, SOUND CARD)

This menu contains the functions for sound effects.

All these effects except SOUND BLASTER VPLAY and OTHER
SOUND CARD can be played through the standard IBM-Pc speaker.
The timing of the sounds will be the same whether played on a
4.77 mhz XT or a 50 mhz '486.

SPEECH - see PC SPEECH

SPRAYPAINT -

With this, you can spray the current color on your picture, just like using a can of spray paint. When selected, an arrow appears. Move to the desired location, and hold the left mouse button or toggle SPRAY MODE with the spacebar. When done SPRAYPAINTing, click the right mouse

button or press [Esc].

You can change the size of the spray pattern and the density of the spray with ADJUST SPRAY below.

SPRAYPAINT is a disk space-intensive function, so if making a large presentation, you may want to use this sparingly, or convert your ASCII-Vector-Graphics file to a .GIF or .PCX file.

STOP -

When you quit TMW, there is no need to save your current script file, since changes are recorded automatically as soon as they are created.

SWIPE -

This function, found within the SFX menu, clears the screen from left to right, changing the whole screen to the currently selected color. If you want a left-to-right clearing effect to change the whole screen to green, for example, first use CHANGE COLOR to select green, the select SWIPE to clear the screen. You will be asked to type a number representing the amount of time required for the swipe. 1 will make the fastest possible swipe, while a large number like 20 will cause a slow swipe. Swipes run at nearly the same speed on different computers, but vary from one video mode to another.

SWITCH (TO ANOTHER) FILE -

This function lets you pick another script file or create a new one. You can type any DOS-Legal file name, although it is best to avoid extensions used for other purposes such as .COM, .PCX, .BAT, .GIF or .EXE. If you type a file name which already exists, the screen will clear and the chosen file will appear. If you type a new filename, you are given the option of changing video mode or using the current video mode, then a blank screen appears on which you can create a new picture or script.

TEXT MENU -

This sub-menu contains text operations, of course.

TIMING MENU -

This menu is something you'll never see in a typical paint program!

Because of the nature of ASCII-Vector-Graphics scripting, you can partially develop a picture, then alternate some delays with additional picture development, making custom animations and presentations that evolve at the speed a viewer can comprehend.

TITLES -

This is a sub-menu found within the TEXT sub-menu, involving only one line of text at a time. If Shadow options are set, CENTERED TITLE, LEFT TITLE and FLEXI-FONT will project shadows on the screen. To set Shadow options, see MORE, then SET SHADOW, within the TEXT MENU.

TOP BAR - (THE TOP OF MOST SUB-MENUS)

Most menus have a titlebar which contains several functions: Help, Change Color, View, Move, Undo, Close All, and Close.

TOP BAR - HELP -

This appears as a question mark on the upper left corner of most menus. This function presents a complete, on-line owner's manual. Not available in the shareware version.

TOP BAR - CHANGE COLOR -

This is a little box to the left of the "?" icon, and it always shows the current color used for drawing, text, etc. This can also be accessed by pressing [C].

TOP BAR - MOVE -

With MOVE you can reposition the entire menu so that it does not block your view of the current picture. Move the arrow to the menu title, then press [Enter] or the left mouse button. Optionally, no matter where the arrow is, you can type [M] to activate MOVE. Move the menu to a new location, then press [Enter] or click the left mouse button again.

TOP BAR - CLOSE ALL [Esc]

This function is accessed via the down arrow to the right of the menu title. The menu system will immediately return to the main menu, no matter where you are. There is no keyboard access to CLOSE ALL, but it can be emulated by pressing [Esc] several times in a row.

TOP BAR - CLOSE [Z] or [ESC]

This function, represented by a "-" in the upper right corner, will cancel the current menu and return to the previous menu level. Selecting CLOSE is the same as pressing the [Esc] key or clicking the right mouse button.

TRIANGLE -

When TRIANGLE is selected, you are given four options, Apex at Top, Bottom, Left or Right. Pick one, and then you can draw equilateral triangles with the apex (point) facing the chosen direction. They work like rectangles, meaning you use the right mouse button or space bar to change size/shape, and then click the left button or press [Enter] when done. You can draw subesquent triangles, or press [Esc] or right mouse button to return to the menu. If you want to draw a triangle with apex facing one way, then another with the apex facing another direction, you must return to the menu first, then reselect TRIANGLES.

UNIVERSAL CONVERTER -

The UNIVERSAL CONVERTER is a not supplied with the shareware edition. It offers a menu of 85 choices, many with sub-choices totaling over 600 mathematical and other types of conversions. For instance, you can convert metric to inch, frequency to musical notes, and Fahrenheit to Centigrade. The Universal Converter can also be run as a separate DOS program by typing UC at the DOS prompt.

UNDO -

Almost anything you can do, you can undo. UNDO is represented by the "U" directly to the right of the title on most sub-menus. This will remove the last item added to the current script file, clear the screen, and replay the file. There is no limit to how many times you can use UNDO. It is possible to UNDO all the way back to the beginning of a file, leaving nothing but a blank screen. UNDO is a smart function which will undo groups of lines from a script file when it is sensible to do so. For instance, if you have done a bit of PIXEL EDITing, and then select UNDO, the whole PIXEL EDIT session will be removed, rather than just the last dot you changed. This eliminates the need to select UNDO numerous times in a row to remove seemingly small changes. UNDO can also be accessed by pressing the [U] key.

UNDO purposely ignores delays and sounds when replaying files so that it's operation is faster. To examine a script file exactly as an end user will see it, select VIEW from the main menu.

USER MENU -

The User sub-menu contains user interaction functions such as Intelligence and Wait For User.

VIDEO -

Normally, when you start a new script file, you are offered a choice of video modes. The mode can be changed at any time, not just when you first create a script file, via

this menu item.

If you change video mode in the middle of a script file, anything currently on screen will be erased, leaving a blank screen, and you can start over in the new video mode.

VIEW -

This is the "V" at the top of most menus. It will blank the screen and replay the current script file from the beginning so that you can see exactly what end users will see. This can also be accessed by pressing [V].

VIEW ALL SETTINGS -

This function, within the DOOR sub-menu, puts a chart on the screen showing all the current settings of TMW. These include current script file, current font, color, delay preset, grid status, and more. Press any key when done viewing this chart.

VIEW PRESENTATION - (see also BUILD PRESENTATION)

A presentation is made up of two or more script files. When this feature is selected, your entire presentation can be viewed, almost as if you were an end user using TMWSHOW.EXE.

It doesn't matter what script file is currently loaded, VIEW PRESENTATION simply looks for the file CMSHOW.CFG, (created with the BUILD PRESENTATION option on the BUILD menu) and displays the files found there.

Because VIEW PRESENTATION emulates TMWSHOW.EXE while TMW is loaded in the background, some functions are not available which are part of TMWSHOW.EXE. Simply too much RAM is required. Executable programs built into CMSHOW.CFG (with BUILD option) may be ignored. SPEECH synthesis may also be ignored.

While VIEW PRESENTATION is in effect, the main menu changes to emulate the menu in TMWSHOW.EXE. When you select QUIT from this menu, the normal main menu returns, and the script file previously loaded is replayed.

WAIT FOR USER -

This is a neat, but also a tricky function. When selected, a halt is written into the script. The computer then waits for the user to press any key before continuing. This is useful in cases such as this:

Let's say you are demonstrating the four strokes of a four-cycle engine. First you picture the intake stroke. In your picture is a caption, "Intake Stroke" plus the words, "Press any key to continue..."

After the WAIT FOR USER, you erase the position of the piston and contents of the cylinder and draw the compression stroke. You also erase the caption and replace it with, "Compression Stroke." So, when the user presses a key, the picture changes to show the compression stroke.

And, you repeat this with two more WAIT FOR USERs and two more changes to illustrate the firing stroke and the exhaust stroke. $\,$

The reason WAIT FOR USER is "tricky" is that it may fool end users, and even you, the author, if you forget to put the words, "PRESS ANY KEY..." or something similar in your pictures. The presentation will stop until a key is pressed, and the end user may think the computer has locked up or broken. I've been fooled several times by this myself as I was developing scripts with WAIT FOR USER in them.

WORK DIRECTORY -

TMW puts all the files you create in a directory on your hard disk called the "Work Directory." Any runtime files you need, such as TMWSHOW.EXE and fonts are also automatically copied into the work directory. When starting a new project, it is generally advisable to create a new work directory, so that you can simply change directories to jump

from one project to another, without getting your files mixed up. $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

Also, you can simply copy all the files in the work directory to a floppy disk when done, and you should have everything you need.

To switch to another work directory, or to create a new one, simply type a DOS-legal directory name. If the directory name you type does not yet exist, it will be created for you.

Normally TMW will start in whatever directory from which it is called, and offer that as a suggested work directory. If you pass a filename at the command prompt, it will start in the current directory or whatever is listed in the command line file/path name when it starts, and jump right in, without asking about work directory or filename.

XOR/WYSIWYG MODE -

There are two drawing modes used by the most common drawing operations in TMW, Lines, Filled Boxes and Rectangles, if the video mode is high-resolution 16 or 256 colors, Xor Mode is fast and smooth but does not always show Lines, Rectangles and Filled boxes in their true colors, until a figure is finished. Xor Mode also represents Filled Boxes as empty rectangles until they are finished. True colors are shown and Filled Boxes are filled when you are done moving/sizing, when you press [Enter] or the left mouse button.

WYSIWYG (What You See Is What You Get) Mode, always shows Lines, Rectangles and Filled Boxes exactly as they will appear in the finished product, but is slower, and blinky in these listed video modes. WYSIWYG works fine in other video modes, and is the only mode used, even if Xor Mode is selected for low-resolution modes.

Currently, WSYIWYG mode is always used for Circles, Ellipses, Arcs and Dashed Lines, even in high-resolution modes, and choosing Xor Mode will have no noticeable effect with these elements.

ZOOM BLOCK -

With this function, located within the BLOCK sub-menu, you move/size/shape a rectangle to enclose an area. Then you once again move/size/shape a rectangle. The first area will be stretched or shrunk and copied into the new area. There is a limit of no more than 200 vertical pixels in height and no more than 200 pixels wide for ZOOM.

HYPERLINKS AND DEFINITE JUMPS

One of the most complex concepts in multimedia creation is hyper-linking (also known as hyperlinking). Not all multimedia creation programs have this feature, and it is not required for making excellent TMW presentations, but if you master it, you can add wonderful user interaction to your presentations.

Hyperlinking (as I define it) is the ability for an end user to point to and select something on the screen and be taken to another part of your presentation based upon that selection.

It is up to you to design screens containing text, icons or objects which the end user can select. It is also up to you to create the links. In other words, if the user points to X, then you have the presentation run file Z. You might, for instance, design a screen with a frog, a cat, a lizard, and an ant. The user can point to one of these animals, and be taken to script file with more information about amphibian, or mammals, or reptiles, or insects.

Here's another example. You draw a sewing machine. If the users select an area around the needle, you take them to a script about threading the needle. If they point to the bobbin winder, you take them to a "winding bobbins" script, and if they point to the tensioner, you take them to a script which explains the tensioner settings.

Normally you build a presentation by completing the screens containing icons, text or whatever you use to indicate hyperlinks first. We'll call these menu screens. Then, you build the scripts or files which are to be hyperlinked. Finally, you go back to the menu screens and actually create the links. For each link, select HYPERLINK from a menu. You will be asked to type a filename, then a rectangle will appear on screen. Size, shape and move the rectangle to enclose the area in which your users can click to get a link. From this point on, when your users use TMWSHOW, and the menu screen is visible, if users move the arrow into the invisible hyperlinked rectangular region, the presentation will then show the hyperlinked script.

Of course you can have up to 50 links per menu screen*, and as many menu screens as you like. For instance, you could have a menu screen which shows several bugs including spiders and insects. If they click on a picture of an insect, then the presentation could show a second menu screen showing bees and ants (both insects). If they click on bees, they could be shown yet an other menu screen with honey bees, bumblebees, etc. If they click on bumblebees, you might finally present a script talking about bumblebees.

* Intelligence (Character Mode) shares the same memory with Hyper-Links. So, if you have 8 Intelligence links in a script file, then you can have only up to 42 hyper-links.

Definite Jumps

At the end of your bumblebees script, you need a Definite Jump. A definite jump will unconditionally take the user to a specific script after the current script is shown. When your users are done learning about bumblebees, the program should not end. The users may want to find out about different bugs. So at the end of the bumblebee script you insert a Definite Jump back to the bugs menu script so they can go through the process again. In fact, there should be a definite jump back to the bugs menu script from every single hyperlinked script in your bug presentation, so the user never gets lost, but always returns to the main bug menu.

There are other uses for Definite Jump, too, with or without hyperlinking. I often use it as a way to concatenate scripts. For instance, I have a standard advertising script for Computer Magic which I put in almost all of my shareware presentations. The last screen in each presentation uses a Definite Jump to show the CM ad.

What If

What if you have two overlapping hyperlinked regions? If your insects area overlaps your spiders area, what happens? The last one in order in your script file is the one which will take effect. If you made a hyperlink for insects first, then the spiders one, and if your end user clicks where both hyperlinked areas overlap, then the last hyperlink is the one which will work. In this case, your user will be taken to the spiders script.

What if the user confronted with your bug menu script clicks on an area which has no hyperlink. Perhaps the user clicks on a blank area between your spider picture and your

insect picture. Normally, this would cause the presentation to continue. If your whole thing is based on the bug menu script (in batch mode), then the user would get dumped out to DOS. Your user would have to restart TMWSHOW to learn more about bugs. But there is a more elegant way. You can hyperlink the whole bugs menu screen, and have the whole screen hyperlink recall the bugs menu script. This creates a bit of a quandary, however. If you add the whole screen hyperlink last, then the user can never get out of the bugs menu, since anytime they click anywhere on the screen, the bugs menu script will be replayed.

If you make the whole-screen hyperlink first, you cannot continue to work on your own picture, cause you'll put TMW.EXE into an endless loop. So what you do is make your full screen hyperlink last, then, using a text editor, move that line to the top of the list in your script file.

Now, if you are sharp, you'll see another little problem. How do you let your users out? There are two ways. One is to make an icon or something in your menu showing the exit, then hyperlink a script which does not do a definite jump back to the bugs menu script. You can use this as a dropout or advertising script. The other way is to hyperlink using STOP, in capital letters as the filename. "STOP" is not a file, but a special code to the hyperlinking mechanism, to let users out of a full screen hyperlink.

Hyper-Links and Intelligence

Intelligence (Character Mode) is very similar to, and compatible with hyper-linking. This makes a great menu system, because you can do tricks like showing a menu bar, with which your end users can click on a item on the menu, or press the first letter corresponding to one of the titles on your menu - their choice.

To incorporate hyper-links and Intelligence (Character Mode) simultaneously, simply create links for each menu item, then create Intelligence character links for all the same items.

When combining Intelligence Character Mode with Hyper-links, you can use letter keys or punctuation keys, but not number keys. This is because keyboard support for arrow movement uses the number keys, and therefore the user may press a number expecting to move the arrow, and get linked instead.

See the Intelligence chapter (INTLGNCE.DOC) for more information.

Another Little Trick

In addition to script files, you can use Hyperlink to run executable (.EXE, .COM or .BAT) files or to display .PCX image files. You can run a spreadsheet, a video game, Writer's Dream, even another TMWSHOW presentation this way. However, there is no direct way to put a Definite Jump or hyperlink into anything other than a script file. If you want to run an executable, then hyperlink or Definite Jump back into the presentation, create a new script file, containing nothing but a hook to the executable (or file, and then the hyperlink(s) or Definite Jump. To hook an executable file into a script, use HOOK PROGRAM from the file menu.

A Surprise

Maybe you figured this out already: You can use TMW to create your own custom picture-based program launcher. For

instance, you could make a script file with "My Menu" at the top, and a bunch of custom icons representing your favorite programs. Then hyperlink all your icons to your programs. This way, you can point to your Word Perfect icon, and run WP. Or point to your XTree icon, and get Xtree. Or point to your picture of a blank disk, and start FORMAT.COM.

Going a step further, imagine that you want to sell your old used computer to a friend who is computer illiterate. All he wants to do is play Pacman, and write letters. For him, you make a menu which contains a picture of Pacman, another of a letter being written, and a few more for basic DOS services like formatting disks and copying files. Then you hyperlink in .BAT files which actually perform the services desired. You could even simplify it further for your friend by linking in help scripts. For instance, when your friend clicks on the format disk icon, you first present some basic information about what FORMAT.COM does, why it is needed, and how to do it. Then you could offer another menu, "Format A:, Format B:, Cancel." If your friend then points to the "Format a:" option, you hyperlink a batch file which says, "FORMAT a:/u/s," or whatever you think is best.

I'll leave you to imagine all the possibilities now...

THE RUN-TIME PROGRAM

There is a run-time program included in this kit to display presentations created with TMW. In most cases, you will want to include it with your pictures on disks that you distribute, so that the end users will be able to use your pictures.

TMWSHOW runs in either of two modes, "BATCH" or "PRESENTATION" MODE. In Batch mode, it displays one script file, complete with graphics, sound effects, etc, then waits for the user to press any key before returning control to DOS. In presentation mode, it displays a series of picture files and presents the end user with a menu from which the user controls the presentation. Note that Batch Mode can blossom into long and complex presentations by hyperlinking off one script file.

When TMWSHOW starts, it looks to see if there is an accompanying picture file name typed at the DOS prompt or provided in the batch file from which you may have called TMWSHOW. If found, TMWSHOW displays that picture file, then returns to DOS.

If there is no picture file listed with the call to TMWSHOW, it looks for a special file on disk called CMSHOW.CFG, which is created with the BUILD option on the TMW main menu. If it finds CMSHOW.CFG then it runs in presentation mode, using the group of picture files listed in the CMSHOW.CFG file. If you list a different file with a .CFG extension on the command line or within a batch file, TMWSHOW will look in that file for a list of the scripts to display in presentation mode.

In presentation mode, a small menu appears allowing the user to take one of several actions. They are:

HELP

BACK

NEXT

RES

AUTO

GOTO

FIND QUIT These options can be selected with the mouse, arrow keys or number keys (with [Num Lock] on for faster movement) then a press of the [Enter] key, or a click of the left button. You can also press the first letter of any menu item.

HELP displays a single screen of information about how to use the menu (although quite unnecessary!)

BACK shows the previous picture viewed.

NEXT shows the next picture in your presentation,

RES (Resume) displays the last picture viewed during the last time TMWSHOW was used. It does this by writing a small file to disk containing the number of the picture currently displayed when the user quits the TMWSHOW program. The next time the program is started, if the user selects RESUME, it reads that file and finds the picture so the user can continue from where he left off.

AUTOmate is to display your presentation over and over again automatically. When selected, TMWSHOW asks you to type a number of seconds. It will pause for that long between each picture. When it comes to the last picture in your presentation, it will start all over again. This is excellent for trade show displays, retailers can put a monitor in their store windows at night advertising their products, computer retailers can leave TMWSHOW running on computers in their stores. A student at a science fair can create a show about her project and display it at her table.

GOTO is an electronic Table of Contents. When selected, the end user is presented with a picture of a Table of Contents, and can type a number, and then be taken to that picture within your presentation. This is optional and requires that you make a special picture called GOTO. If TMWSHOW does not find a GOTO file, it merely ignores the GOTO request without harm. Making a GOTO picture is easy, and I'll tell you all about it in a couple of minutes.

FIND allows the end user to type a word or phrase. Then, starting at the beginning of your presentation and working to the end, TMWSHOW quickly searches each picture file for that word or phrase. If found, the picture is displayed on the screen and a small menu appears to allow the end user to continue searching for more occurrences, or return to the regular menu. In addition to selecting SEARCH with the mouse or menu bar, the user can press [S] or [F] to begin a search. As you might expect, it works rather slowly when a big presentation is on a floppy disk.

TIIO

This is the way out to DOS.

NOTE: All runtime programs used by your presentation must be copied onto your final disk. If you use digitized speech, PC-TALK.EXE and the speech files must be copied along with your script files.

Also, if you use any fonts except DEFAULT then the corresponding .CMF files must be copied onto your finished disk. If you use Live Text, the corresponding ASCII files must also be available. If you use .PCX or .GIF images, these, too must be on the end users' disks.

MAKING A GOTO FILE

This is optional. The GOTO file is a special picture file which is used by GOTO as a 'live table of contents.' The user

can type a number corresponding to any of the pictures in your presentation, and be taken to that picture.

First complete all the pictures in your presentation and use TMW's BUILD option to make an CMSHOW.CFG file. Make a note of the numbers to the left of the picture files that will be key points in your presentation.

To make the GOTO file, start a new picture file by selecting FILE from TMW's control panel and call it GOTO. No other name will do, and it cannot have any extension. In this file, list or illustrate the key pictures in your presentation and put a number next to them. These numbers are the number of the script file's position in the menu. The first script file is 1, and the second is 2, etc. In other words, if you have created a catalog of blacksmith's tools, and you have several pictures of anvils, you need to know the position of the first picture file of an anvil in your anvil section. This will be one of your goto points. You can have as many goto points as you can fit onto the GOTO picture.

When your GOTO picture is done, include it along with your other picture files, CMSHOW.CFG and TMWSHOW.EXE in a sub-directory or on a disk, then test it by running TMWSHOW, selecting GOTO, and typing the numbers for the various points, and make sure the pictures you expected come up as you planned.

COMPLEX PRESENTATIONS

You can now put 2, 3, 4 or actually an unlimited number of independent presentations on a single disk.

Normally, TMWSHOW.EXE looks for a file called CMSHOW.CFG, and if it finds it, a presentation begins. However, you can create more than one CMSHOW.CFG file, and rename the second one. It can have any DOS-legal filename, as long as the extension is .CFG. Then, when starting TMWSHOW.EXE, whether from the command line, or from a batch file, if you don't want it to use CMSHOW.CFG, but rather a different .CFG file, specify it as the first parameter after you type TMWSHOW.

Furthermore, you might want to use separate GOTO files for each presentation. Therefore, if you specify a script file name as a second parameter, that will become the GOTO picture.

Here is an example:

TMWSHOW FIRST.CFG GOTO1 TMWSHOW SECOND.CFG GOTO2 TMWSHOW THIRD.CFG GOTO3

A batch file containing these lines will run three separate shows, all running from their own selections of files as specified first by FIRST.CFG, then by SECOND.CFG and finally by THIRD.CFG. Each presentation will have it's own GOTO picture.

NOTE: If you use GOTO files at all, you should specify a goto file by name as a second parameter for each instance of TMWSHOW.EXE. Otherwise, if there is a file named "GOTO," that one will be used for each presentation, whether or not it would correspond to the correct show.

RENAMING TMWSHOW.EXE

Using the DOS command REN (Rename) you can change TMWSHOW.EXE to BEGIN.EXE or GO.EXE, or you can make a batch file called GO.BAT or START.BAT (etc) that starts TMWSHOW. This makes it

easier for the end user to start your presentation.

USING TMWSHOW IN BATCH MODE

Batch mode is for displaying a single script file from the command line, or for use within batch files. TMWSHOW will simply show a picture, along with it's sound effects, hyper-links or animation, then wait for the user to press any key. When a key is pressed, control is returned to DOS.

Using Batch mode to display a single picture which is a hyper-linked menu to all other pictures or series of pictures in your presentation is a very clean way to make a presentation which can entirely eliminate the top menu bar.

To use batch mode from the DOS prompt, type TMWSHOW, a space, then the name of the picture file that you want to display. For example:

TMWSHOW C:\PICTURES\SPIDER.3

or

TMWSHOW SPIDER.4

if your picture file is in the same place as TMWSHOW.EXE.

If you have a few pictures you want to display, and you want to use a batch file to line them up, you can do something like this:

Make a batch file called BEGIN.BAT, and in it, include these lines:

TMWSHOW SPIDER.1 TMWSHOW SPIDER.2 TMWSHOW SPIDER.3 TMWSHOW SPIDER.4

When this batch file is run (when the user types BEGIN) a picture of a spider, your picture called SPIDER.1 will appear. When the user is through studying the first spider and presses any key, your next spider picture, SPIDER.2, is shown, and so on until all four pictures have been shown.

And of course you can also use the batch file to run other programs, for instance:

TMWSHOW MY_INTRO.PIC
MYPROG.EXE
TMWSHOW END.PIC

Hyper-links work from batch mode the same as from presentation mode. $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left($

The more you learn about batch files, the more things you can do in the way of mixing and matching programs, picture files, more programs, etc. For instance, you could make a catalog disk which is mostly text, but in between displaying price lists with a text presentation program, you could display pictures of your more popular or interesting products.

NOTE: If you have used any fonts except DEFAULT within TMW, their corresponding disk file(s), \star .CMF, must be on your presentation disks along with your picture files.

SHAREWARE VS REGISTERED VERSIONS

Please feel free to use and enjoy this fully-functional shareware package. You may use it to play with, and to make

presentations for your own personal use. If you make presentations which will be distributed in any manner, you MUST register. This includes educational materials in your classroom or factory, your own shareware products, anything you make for sale, and anything uploaded to a BBS.

The price of registration is \$29.95. With this registration, you will be licensed to make as many copies of as many presentations as you care to create! Runtime programs, fonts and other support files can, of course, be distributed with your finished products. When you register, you get Computer Magic, Standard Edition, at no extra charge. It has more .TXT files, online help, the Universal Converter and some other programs and features not found in this shareware edition. Computer Magic is just like TMW, and uses the same scripting language, so you can use directly presentations you have created with TMW.

COMPUTER MAGIC, PROFESSIONAL EDITION

You can also purchase Computer Magic Professional Edition for \$99.95. It includes everything in TMW, plus everything in Computer Magic, Standard Edition, plus:

- * 43 more fonts
- * A multiple-choice/true-false test presentation module. Create full multimedia tests with from 1 to 100 questions. You can establish links for each question to show remedial information when questions are answered incorrectly, or congratulatory screens for correct answers. An encrypted scores file is written on the disk for each student, so that tamper-proof unattended study is allowable, then teachers can examine the students' results.
- * A module which scrambles any image into a picture puzzle which end users can reassemble with mouse or arrow keys.
- * A line editor, also known as a debugger, with which you can examine your script files line by line, going forward or backwards, slow or fast, and see how each line affects your presentation. You can even edit lines on the fly and see results immediately.
- * A special effects module with which you can build in all sorts of neat effects such as Diamonds, Fingers, Lava Flow and Nova. In some video modes, two image effects are also possible, such as replacing one .GIF image with another in a series of diagonal lines.
- * FlexiFont, a special font which you can display at any angle, in any height, width, position and color, to perform such tricks as wrapping text around curves and making text which expands from left to right, etc.

Enjoy!
- Jeff Napier d.b.a. Another Company
September 10, 1994

ORDER FORM

To registered TMW (and get Computer Magic at no extra charge), cut out this order form and print it with your favorite word processing program, and mail it with a check or money order. Or phone or e-mail Another Company with your Visa or MasterCard.

Another Company P.O. Box 3429

Ashland, OR 97520 USA phone 503-482-3611 (no technical assistance) Internet: anotherco@aol.com CompuServe: 71022,175 America Online: Another Co

	name		
	address		
	Preferred disk size, please circle	one:	
	5.25" 3.5"		
Qty.	Item	Each	Subtotal
	_Computer Magic, Standard Edition	29.95	
	_Computer Magic, Professional Edition	99.95	
	_Computer Magic Extra Fonts*	29.95	
	_Multiple Choice Test Module*	29.95	
	_Puzzle Module*	29.95	
	_Line Editor Module*	29.95	
	_Flexifont Module*	29.95	
	·		
		total:_	

NOTES: Free worldwide postage is included. Shipped on standard high-density disks only. These are entirely disk-based products. You are not paying for fancy packaging or redundant paper-based manuals. Overseas: Send payment in US funds drawn on a US bank. Thanks for your order.

* Items marked with * are included in Professional Edition.

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