DISPLAY DEVICE DRIVER TEST SCRIPT

The screen display test script utilizes a test utility called SIMTEST as well as running various commands in the DESKTOP APPS provided with Windows, and program switching with Standard Applications. Accompanying this test script are the SIMTEST program and datafiles and a formatted Write file called GENERIC.WRI.

SIMTEST

SIMTEST should be run simultaneously with the EGA in HI RES mode. This will provide visual verification between the EGAHIRES screen driver and the driver being tested. SIMTEST utilizes GDI function calls in displaying the datafile contents.

All of the following files should be run with a Color display. Only the Monochrome data files need to be run if testing a Monochrome display.

RUNNING SIMTEST:

1. In SIMTEST:
    a. Select Datafile-Run
    b. Select Datafile name from list

2. At DOS prompt:
    a. WIN SIMTEST DataFile1 DataFile2 ...

3. Pause after each Datafile run (Wait for user to hit <SPACE>)
    a. WIN SIMTEST -w DataFile1 DataFile2 ...

DATAFILES:

Monochrome files:	Color files:
TEST3.SIM	TEST1.SIM
TEST4.SIM	TEST2.SIM
LINEDIR1.SIM	LINDIR2.SIM
LINESTY1.SIM	LINESTY3.SIM
LINESTY2.SIM	RECTSTY4.SIM
RECTSTY1.SIM	RECTSTY5.SIM
RECTSTY2.SIM	ARCSTY1.SIM
RECTSTY3.SIM	PIESTY1.SIM
ELPSTY3.SIM	PIESTY2.SIM
ELPSTY4.SIM	ELPSTY1.SIM
ALTPOLY3.SIM	ELPSTY2.SIM
ALTPOLY4.SIM	ALTPOLY1.SIM
WNDPOLY3.SIM	ALTPOLY2.SIM
WNDPOLY4.SIM	WNDPOLY1.SIM
POLYSTY2.SIM	WNDPOLY2.SIM
RNDRECT3.SIM	POLYSTY1.SIM
RNDRECT4.SIM	RNDRECT1.SIM
PIXLDIR1.SIM	RNDRECT2.SIM
ALTPIXL1.SIM	TEXTCLR1.SIM
STRBLT2.SIM	TEXTCLR2.SIM
	PIXLDIR2.SIM
	ALTPIXL2.SIM
	STRBLT1.SIM
	ROP2STY1.SIM
	ROP2STY2.SIM
	ROP2STY3.SIM
	ROP3STY1.SIM
	ROP3STY2.SIM
	ROP3STY3.SIM

Note, there is a READ.ME file provided with the SIMTEST files containing further instructions on using SIMTEST.

STANDARD APPS RUNNING FULL SCREEN

TEXT MODE:

Run a Standard Application in Text mode using Full Screen. In the following explanations, Microsoft Word will be used as an example. Set up a PIF file for the application. For Microsoft Word with the following settings are recommended:

WORD.PIF

Program Name:	WORD.COM			
Program Title:	Microsoft Word 3.1			
Parameters:	/C /K			
Initial Directory:	(blank is okay)			
Memory	KB Required: 256	KB Desired:	256 (or blank okay)	
Directly Modifies:	Screen: off	Com1: off	Memory: off	
	Keyboard: off	Com2: off		
Program Switch:	Text			
Screen Exchange:	Text			
Close Window on Exit:	Off			

The following tests include the utilization of Winoldap features for Program switching, Mark/Copy/Paste, and Screen Grabbing.

Program Switching:

Run the Application. Press Alt + ESC to switch out of the Application to MSDOS Exec. Verify the MSDOS screen is returned to its original state and the Application ICON is in the ICON "parking lot" below the window. Select the Application ICON and restore to full screen. Press Alt + Tab to get the title bar of all open windows. Select MSDOS Exec. Verify the screen is completely restored with each program switch.

Transfering Data Through Clipboard:

Run the Application. Press Alt + Spacebar to pull down the Control Menu. Verify the difference in intensity of the Minimize, Mark, and Copy commands. Use the Mark and Copy commands to copy text to the Clipboard. Use the Minimize command to switch back to MSDOS Exec. Run Clipboard and verify the contents. Switch back to the Application in full screen. Press Alt + PrtSc (* on num pad if using a new style keyboard). Verify contents on Clipboard.

Quitting:

Quit the Application and verify you are returned back to Windows and the screen is completely restored.

GRAPHICS MODE:

Run a Graphics type Standard Application in Full Screen. The only tests you need to perform include Program switching with Alt + ESC and Screen Capture with Alt + PrtSc. Use the same guidlines described above. Note, the PIF file should be set up for "Program Switch" as Graphics/Multiple Text and "Screen Exchange" as Graphics/Text with most Graphics programs. Microsoft Chart and Lotus 123 are examples of graphic type applications which can be used for this testing.

WHAT TO LOOK FOR:

Things to look for include unnecessary flashing on the screen during the switch, Windows screen colors/patterns are not corrupted, and the previous window configuration is unchanged (number of windows opened, size, etc.)

STANDARD APPS RUNNING IN A WINDOW

Run a Standard Application in a Window, such as Microsoft Multiplan. Once again, a Text type application which can be configured to run in a Window can be used for this test. Use the following PIF file as an example for Multiplan:

MP.PIF

Program Name:	MP.COM			
Program Title:	Microsoft Multiplan 3.0			
Parameters:	(blank)			
Initial Directory:	(blank is okay)			
Memory	KB Required:	256	KB Desired:	320 (or blank okay)
Directly Modifies:	Screen: on		Com1: off	Memory: off
	Keyboard: off		Com2: off	
Program Switch:	Text			
Screen Exchange:	Text			
Close Window on Exit:	On			

Run Mulitplan using this PIF file and perform the following Window operations:

Move Window
Size Window
Scroll within Window
Mark/Copyto clipboard
Paste from Clipboard
Switch between windows using Alt + TAB and Alt + ESC

USING THE DISPLAY DRIVER WITH WINDOWS APPS

The display driver should be used extensivly for 1-2 weeks within the Windows environment. In past testing, the following Window Applications have been useful in debugging display drivers. We suggest you cover the following areas as part of this 1-2 week testing period.

WRITE:

The file GENERIC.WRI is provided on the enclosed disk. It is helpful in verifying the display of character and paragraph formatting. Use the file for changing fonts and fontsizes. Make sure a printer supporting various fonts and character formatting has been setup in the Control Panel. The Postscript printer driver is good for this. Also, you should verify the changes which occur as you setup different types of printers, such as a Laser printer, a Dot Matrix printer, and a Plotter.

With GENERIC.WRI, confirm the screen display. The file is self explanatory on the type of formatting you should see, Verify the following:

Character Formatting:

- Italic
- Bold
- Underline
- Superscript/Subscript
- Combination of these

Select a paragragh and format for the following:

- Justified
- Left
- Right
- Centered
- Indents
- Single spacing
- 1 1/2 spacing
- Double spacing

Turn the "Ruler On":

- Enter a table of numbers with tabs
- Add and move tabs on the ruler

Select entire file (press ctrl and click mouse in left margin)

- Change fonts
- Change font sizes
- Verify effects on:
  - Selected text
  - Unselected text
  - Paragraph formatting
  - Character formatting

Using the clipboard, data can be transfered between Window Applications. The following test verifies data is transfered and displayed on the screen properly:

Select text and cut then paste into Write.
- Verify formatting is maintained.

Create a picture in Paint and paste into Write

Create a picture in Draw and paste into Write

Formatting pictures:

Selecting a picture
- Verify highlight on entire picture

Moving a picture
- Verify entire picture is moved

Re-sizing a picture

Select and format a picture and text
- Verify text formatting does not effect picture

Change printer resolution with bitmaps
- Verify size of bitmap picture changes (set up for LaserJet or Postscript printer driver)

Scrolling of Text:

Up/down/left/right
Verify refresh of text/pictures
With text only
With pictures (bitmap and PIC) and text

Changing Printer Orientation:

Landscape
Portrait
Verify effects on:
Text spacing
Paragraph formatting (left, right, justified, etc.)

Verify effect of different Printers installed in the above situations:

Plotter
HP LaserJet
Apple LaserWriter
Epson FX-80

PAINT:

The following tests should be performed by using the different tools available within Paint.

Display of various fonts and fontsizes:

Use TEXT tool to enter all keyboard characters
Change font of entered text (before hitting return or clicking mouse)

Display of font styles: (perform in conjuction with above)

Italic
Bold
Underline
Outline
Strikeout

Using Clipboard to Cut/Copy/Paste pictures:

Use selection net to select picture
Verify selected picture "greyed"
Cut picture to clipboard
Verify selected picture is removed
Verify on clipboard

Use selection box to select picture
Copy picture to clipboard
    Verify
    Verify on clipboard

Paste
    Selection box used to cut/copy
    Selection net used to cut/copy

Clear
    Selection box used
    Selection net used
        Verify selected picture "greyed"
    Verify not on clipboard

Invert
    Selection box used
    Selection net used

Trace Edges
    Selection box used

Flip Horizontal
    Selection box used

Flip Vertical
    Selection box used

Using Palette:

Patterns with:
    Fill shapes
    Paintbrush
    Spray can
    Paint bucket

Brush widths with:
    Paintbrush

Line widths with:
    Shapes
    Line
    3-D
    Arc Line

Floodfill with paint bucket

Setting Options:

Zoom In/Zoom Out
Edit Pattern
Grids

Effects of For Screen/For Printer with different printers:

On Paint canvas
Circle pasted into Write

CONTROL PANEL:

Setting Color Preferences:

Screen Colors
Change
Reset
Quitting Windows / Restart

NOTEPAD:

Scrolling with text:

up/down/left/right
Verify complete refresh of text

DRAW!:

Using Draw Tools:

Text
Line
Various Shapes

Selecting Patterns and Color:

Vector
Bitmap
Color

Changing the View:

Background Color
All Pages
Current Page
Actual Size

Formatting Text:

Type specifications
System Fonts
Graphic Fonts

GENERAL

Selecting menu commands from all areas on screen:

Vertical positioning
Top/Middle/Bottom
Horizontal positioning
Left/Middle/Right

Pulling down menus:

Using mouse, click and drag across menu names, down a specific menus commands, etc.
Using keyboard with Alt + menu letter, up/down/left/right direction keys.

Zooming Windows/ICONs

Moving Windows/ICONS

Sizing Windows/ICONs

PROBLEMS FOUND DURING TEST:

If a problem is found while performing these tests, we suggest you run the same test on the EGA HIRES configuration to confirm if the problem is related to the screen display being tested. Also, if the problem is related to fonts or character formatting, you may want to change the default printer.

TESTING THE DISPLAY DRIVER WITH MICROSOFT EXCEL

To enhance the Display Device Driver Test Script, Microsoft PC Excel has been added in the testing methodology. Excel's use of GDI calls in charting, in the Feature Guide, and in the Tutorial gives an overall perception of the display driver's functionality.

The following Microsoft Excel tests should also be run along side and EGA or VGA display comparing screen updates, colors and patterns, and alignment of text and objects. It is recommended to go through the entire Excel Tutorial and Feature Guide, but the areas to concentrate on are listed below:

TUTORIAL:

1. Select from the Help menu, Tutorial.
2. From this menu choose Charts (4).
3. Then select, What is a Chart (1).
4. Once completed then choose, Changing How a Chart Looks (3).
5. After step 4 is completed, Quit.

FEATURE GUIDE:

1. Select from the Help menu, Feature Guide.
2. From this menu choose Charts (4).
3. Then select, Overview (1).
4. Once in Overview, you will be prompted to take a Side Trip. Take only the first Side Trip. After that just Continue through the Overview.
5. After step 5 is completed, Quit.

CHARTS:

1. Select from the File menu, Open.
2. From the EXCELCBT directory select the chart, REGION.XLC
3. Click onto one of the columns.
4. Select from the Format menu, Patterns.

WINDOWS PRINTER DRIVER TEST DESCRIPTION
Revised 4/29/88

The following test description and test files comprise the suggested printer driver test suite. In testing a printer driver, it is necessary to test under all possible conditions. This would include testing with each Desktop application in the Windows package, as well as the most popular Windows applications available on the market. It is also important to thoroughly test the various features available through the driver. For example, the driver may support portrait and landscape orientation, various paper sizes, printing quality and graphic resolutions, software fonts or font cartridges, various paper bins, auto and manual feed, and draft mode printing. We say "may", because each printer is unique, and each driver generally supports the unique features of the device. There are also different types of devices. Currently, Windows supports laser printers, dot-matrix/inkjet printers and plotters. Each of these types of drivers is very different from the others, and the testing requirements need to be focused on the differences. The test description and test files are to be used as a guidline for testing each unique driver. The tester is responsible for testing each feature available in the driver. Please note, there are some references to the differences between laser, dot-matrix/inkjet, and plotter drivers in the following sections.

There are some concepts related to printing which need to be defined in order to fully understand the purpose of the tests. These concepts will also enable the tester to define the testing procedures necessary for the type of device being tested.

Following the section on "Concepts", is a description of the enclosed test files and applications, and special conditions in which the driver needs to be tested.

CONCEPTS

ORIENTATION:

Portrait and Landscape orientation are usually supported by all output device drivers. The easiest way to describe what is portrait and what is landscape, is to picture a letter size piece of paper. Normally, you read a letter with the length of the page being longer than the width. This is what we call orienting the page in Portrait mode. Now, rotate the page 90 degrees, so the width of the page is greater than the length. This is what we define as Landscape orientation mode.

GRAPHICS RESOLUTION or PRINT QUALITY:

Most dot-matrix/inkjet and laser printer device drivers support the option for varying graphic resolution. Depending on the device, this may only affect graphic pictures, not text. On other devices supporting a graphic font (we call a raster font), these may be affected as well. Sometimes this is listed in the Printer Options Dialog box as high, medium, or low resolution, or DPI (dots per inch), or by resolution dimensions (120 x 144 - pixels or dots per inch). It is necessary to test each resolution thoroughly, particularly in graphics applications such as Paint or Micrografx Draw!.

There may even be a section for both "Graphics Resolution" and "Print Quality" for some dot-matrics printers. In this case, Graphics Resolution would affect graphic pictures only, and Print Quality would affect the quality of the hardware text printed, such as Draft or NLQ (Near Letter Quality).

FONTS:

Understanding Fonts is the most confusing area related to printer driver testing. Please see Chapter 7 (pages 141-145) of the Windows User's Guide for additional information. There are three types of fonts supported for output devices under Windows: raster fonts, vector (or stroke) fonts, and hardware fonts. A hardware font is a font which is directly supported by the printer and the printer driver, while a raster font is one that is created by Windows. When a document is sent to a printer, Windows polls the printer driver to find out if the font to be printed is a hardware font. If it is, then the printer or printer driver is left to print the text in the proper character format. If the font used is not a hardware font, then Windows will format the characters and send the document to the printer as a graphic bitmap. This bitmap font is what we call a raster font. On most dot-matrix/inkjet printers, the fonts Courier, Helv, and Times Roman (abrieviated TmsRmn) are usually printed as raster fonts. On the other hand, these fonts usually are hardware fonts on most laser printers. Windows is able to generate a raster font from the font files provided as part of the Windows package (all font files have the extension .FON).

During your printer driver testing, it is necessary for you to make sure all of the font files have been installed through the Control Panel. If the correct font file is not available for raster font printing, Windows will attempt to generate the font internally. Output is generally not very pretty. The font is unclear and "blocky". Under normal use of Windows this is not a problem, because the Setup program automatically installs the correct font files when you choose the printer you will be using. Since this is a testing situation, we recommend you have all font files installed during your tests. This must be done manually after finishing the Setup procedure by adding the fonts through the Control Panel.

The resolution of the output device determines the raster font file to be used. You may notice with Write you may not have the option to format with a Raster font, where in Excel or Pagemaker you will. Write must find a Raster font file with the same aspect ratio as the printer driver. If the aspect ratio cannot be matched to an installed .FON font file, you will not be given the option to choose a font from a font with the closest aspect ratio. This is a limitation within Write.

Vector fonts are always used on Plotters, because plotters are vector devices. A vector font is not a graphic bitmap, but a defined method of drawing a graphic image. Vector fonts are the least-used of the three types. Not all Windows applications use vector fonts. Most of the vector font tests will be run from Microsoft Excel and the Micrografx Draw!.

FONTS ON LASER PRINTERS:

In general, laser type printers do not support raster fonts. You will only be able to print text in directly supported fonts on the printer. Courier, Helv, and Times Roman are commonly supported as a hardware soft fonts. Most laser printers have built-in fonts; some have add-on font cartridges or downloadable fonts. To get the add-on fonts, you would choose from a list of font cartridges which the driver supports. This is generally chosen through the Printer Options Dialog box. Some applications, such as Write, will not allow you to format text for any font which is not available through the current setup (i.e. if you have NONE for a font cartridge, you will not be able to format for TmsRmn which may only be available through a specific font cartridge).

FONT CARTRIDGES:

For output devices supporting font cartridges, the printer driver will normally have a listbox with a list of cartridges. Each of the cartridges will need to be tested to verify the driver correctly defines the font. You can test each cartridge supported by using the hardware font test file for font testing. We recommend that you format and print the entire test file with each font available on the cartridge.

Most font cartridges will specify whether the font is for portrait or landscape mode. Make sure you have properly set up the orientation for the font being tested.

Also, some printers support more than one cartridge, and/or downloadable fonts at one time. In this situation, a specific test needs to be run where you have more than one source of the same font and font size available. For example, you may have a font cartridge with TmsRmn 10pt, and a soft font defined in TmsRmn 10 pt. also. It is the driver's responsibility to decide if a downloadable font or font cartridge has priority in printing. You should be testing for any conflicts in this situation. Things to look for would include character formatting and character spacing with justified text.

FONTS AND GRAPHICS ON STROKE DEVICES (PLOTTERS):

Since plotters are stroke devices, you will only be able to print text in vector fonts. Sometimes, this would be either a Modern, Roman, or Script font. The same is true for graphics. Stroke devices will only be able to print vector or stroke graphics. You will not be able to print bitmap pictures on a plotter. For example, if you are set up to print to a stroke device such as a plotter, the Print command in Paint will be shadowed. Paint only creates bitmap pictures. Applications which we use for testing stroke output devices include Excel, Micrografx Draw!, Write, and some text printing from the other desktop apps.

PAPER SIZE:

Most printer drivers support various paper sizes. The most common sizes include letter, legal, and the international sizes A4 and B5. Below are the actual sizes in inches:

Letter	8.5" x 11"
Legal	8.5" x 14"
A4	8" x 11.5"
B5	?" x ?"

Each size should be tested in both Portrait and Landscape orientation from each application being tested. It is only necessary to test paper sizes with test files which test the edges of the page from a particular application. Not all test files for each application need to be printed when testing page size.

Note, if you are unable to get the international sized paper, we suggest using a little of elbow grease and a paper cutter!

PAPER SOURCE:

Paper sources can include additional paper bins, auto feed, and manual feed. If this is supported by the driver, you would set this up from the Printer Options dialog box. You only need to test this from a few different applications, Write and Excel for example, with only one test file (most of your testing will be from the default source, which is normally autofeed from the main paper bin.) The most important areas to focus on include if the paper is taken from the specified source, and the effect of the various paper sizes from each source.

PRINTERS:

The newer printer drivers being developed for Windows usually support more than one of the same type of printer. These drivers will have a listbox listing the printer name and models. To correctly test a particular printer model, the appropriate name must be selected in the Printer Options dialog box. Each printer supported by the driver needs to be tested completely. This is where the tester needs to analyze the differences in each printer, and test the unique features of each. We suggest running the complete printer test suite on the most "standard" model supported. Then you would test each feature which is unique to the other models. With many of these drivers, 80-90% of it can be tested by thoroughly testing one of the supported printers.

Areas which usually differentiate each supported printer may include: hardware font support, extended character set, graphic resolution, whether wide carriage is supported or not, number and type of paper sources, paper sizes, or the amount of memory available for downloadable soft fonts.

To test a driver which supports multiple printers, the tester needs to gather as much information on the differences between the printer models supported by the driver, and what part of the driver can be exercised by testing one printer completely. By doing this, alot of redundant testing can be eliminated, and focus can be placed on testing unique features of each printer.

TEST APPLICATIONS

WRITE

Write can be used for testing raster and hardware fonts, paper sizes, the extended character set, and a mixture of bitmap and vector graphics, and text. Below is a description of each test file to be printed from Write.

RASTER.WRI:

A Microsoft Write file that tests the raster fonts on Dot-matrix and some Inkjet type printers. It is not necessary to use this file for testing Laser type printers. This file is formatted with Courier, Helv, and TmsRmn fonts in point sizes 8, 10, and 12. The printout is self explanatory as to what should be seen. Should be printed in Portrait and Landscape orientation.

HARDWARE.WRI:

A Microsoft Write file that tests the hardware font(s) of your printer. This file should be reformatted and printed with each supported hardware font. The printout is self explanatory as to what should be seen. This file is used for testing all printer drivers. In testing Laser printers or other printers supporting font cartridges (or downloadable soft fonts), you should use this file to test each all fonts supported on each cartridge. Should only be printed in the orientation supported by the hardware font. Hardware fonts are usually only printed in Portrait mode. Some font cartridges and downloadable fonts are designed to print specifically in Landscape orientation. Make sure to setup the appropriate orientation for each font being tested.

MAINTEST.WRI:

This document represents a "grab bag" of various features available when printing from Write. It includes a header and footer, tab settings, various character formatting, bitmap graphics, and vector graphics. This file should be printed on all printers.

Note, stroke devices will ignore the bitmap graphics. You may receive an error message in this situation. Select OK to continue. The area containing the bitmap will be blank.

PAINT

Paint incorporates driver information as part of a paint picture. This is done when the picture is created, not when printed. You need to configure the printer for the settings you want to test with, run Paint, create a picture, and print. Each time a new driver is tested, or a setting chosen, a new picture should be created to test with. Settings which you need to test with under Paint include, orientation (portrait and landscapte) in each possible paper size, and different graphic resolutions. The resolutions only need to be tested in one paper size and orientation.

When you create the picture, draw a box in each far corner of the canvas. The canvas in Paint is the same as the paper size you currently have setup. You will need to scroll to each corner. Fill in the remaining area with random graphics with different patterns and tools (a time to be creative!)

NOTEPAD

NOTEPAD.TXT:

This file tests the printing of a text file through NOTEPAD.EXE. The file is about two pages long and contains lines of various lengths. It also contains a paragraph whose lines extend off the right margin of the page. Make sure that the printer tested crops these lines and doesn't wrap them around to the next line. On laser type printers, also verify no text is missing from the top, bottom, left, or right edges of the page. Print in Portrait mode only.

MS-DOS Executive

MSDOS.TXT:

This file tests the printing of a text file through the MS-DOS Executive. This file is much the same as NOTEPAD.TXT. From the MS-DOS Executive window, select the file and choose Print from the File... menu.

CARDFILE

CARDFILE.CRD:

A Microsoft Cardfile file which includes a number of cards with text and graphics. All graphics in Cardfile are bitmapped. You need to execute Print, All to print all cards in the file. Note, stroke devices will ignore the bitmap graphics and only print text. This file should be printed in both portrait and landscape modes in each possible graphics resolution.

MICROGRAFX DRAW

Micrografx Draw! files should be printed at each resolution which the printer supports. You may find that printing at the 300 DPI or greater resolutions may require restarting the printer job several times due to low memory conditions. This is expected behavior.

XPAGESP.PIC:

A Micrografx PIC file which extends graphics across 4 pages. This test also tests the affect of printing colors from Draw. The Vector fonts Modern, Roman, and Script are included in this test file. This file should be printed on all printers in Portrait orientation.

XPAGESL.PIC:

This is the same file as above, only it should be printed in Landscape orientation.

MANYP.PIC:

A Micrografx PIC file with many, many types of symbols drawn. We have found many bugs in printer drivers with this file because of its complexity. This should be printed to all printers in Portrait orientation.

MANYL.PIC:

This is the same file as above, only it should be printed in Landscape orientation.

MICROSOFT EXCEL

There is an Excel macro which will automatically run a suite of test files with any printer driver. You must set up WIN.INI with "spooler=no". The macro also requires you enter the printer driver name and printer port at the top of column C exactly as you would see it listed in the Control Panel's Setup, Printer dialog box. To run a suite of files with the current default settings, do the following:

Run Excel.
Select Printer, Setup...
Make appropriate Setting changes to the printer dialog box.
Select File, Open, and open QUICK.XLM
Enter the EXACT text string you see in the printer list box (i.e. HP Deskjet on Lpt1:) in the cell at Column C, Row 2.
Press Ctrl+P to start the Macro
After all files print, Select Printer, Setup...
Make appropriate Setting changes to the printer dialog box.
Press Ctrl+P to start the Macro
Repeat until you have printed the entire suite of files for each configuration.

The entire macro should be run for portrait and landscape orientation, and each possible graphics resolution.

ALDUS PAGEMAKER

PMTIPSP.PUB:

An Aldus Pagemaker publication file. This was created by running through Pagemaker's tutorial in the documentation. Print on all printers in Portrait orientation.

PMTIPSL.PUB:

Same as the file above, only should be printed in Landscape orientation.

Note, we are currently working on getting more thorough printer test files for this particular application. This section will be updated in the future.

PRINTING UNDER SPECIAL / ERROR CONDITIONS

There are other conditions in which the driver need to be tested. Below is a list of test cases for both Spooler=yes and Spooler=no. Make sure to quit and restart Windows after changing the WIN.INI file.

1. With SPOOLER=YES
    - Print to none existant port (lpt, com)
    - Printer Off Line
        - Put on line again, Retry
        - Cancel
    - Printer Out of Paper
        - Add paper, Retry
        - Cancel
    - CANCEL printing from the following apps:
        - Write
        - Notepad
        - MSDOS Exec
        - Paint
        - Cardfile
        - Draw
        - Pagemaker
        - Excel
    - Printer Jobs Queued
    - Pause/Resume from Spooler
    - Terminate from Spooler
    - Close spooler with jobs queued

2. With SPOOLER=NO
    - Print to none existant port (lpt, com)
    - Printer Off Line
        - Put on line again, Retry
        - Cancel
    - Printer Out of Paper
        - Add paper, Retry
        - Cancel
    - CANCEL printing from the following apps:
        - Write
        - Notepad
        - MSDOS Exec
        - Paint
        - Cardfile
        - Draw
        - Pagemaker
        - Excel

3. Memory Conditions:
    - Low-memory, does the driver behave properly?
    - Running out-of-memory, does the driver recover?
    - Running with EMS turned on.
    - Running with EMS turned off.