Printing Reference

Tektronix

Phaser™ 140 Drivers and Utilities

First printing October 1994
070-9070-0

Warranty

Tektronix warrants that this product will be free from defects in materials and workmanship for a period of one (1) year from the date of shipment. If this product proves defective during this warranty period, Tektronix, at its option, will either repair the defective product without charge for parts and labor, or provide a replacement in exchange for the defective product.

This warranty applies only to products returned to the designated Tektronix depot or the Tektronix authorized representative from which the product was originally purchased. For products returned to other locations, Customer will be assessed the applicable service charge. The above limitation shall not apply within the European Economic Area, where products may be returned for warranty service to the nearest designated service depot regardless of the place of purchase.

In order to obtain service under this warranty, Customer must provide the applicable office of Tektronix or its authorized representative with notice of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. Customer shall be responsible for packaging and shipping the defective product to the service center designated by Tektronix or its representative, with shipping charges prepaid. Tektronix or its representative shall pay for the return of the product to Customer. Customer shall be responsible for paying any associated taxes or duties.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. Tektronix shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than Tektronix representatives to install, repair or service the product; b) to repair damage resulting from improper use or connection to incompatible equipment; or c) to repair any damage or malfunction caused by the use of non-Tektronix supplies; d) to service a product that has been modified or integrated with other products when the effect of such modification or integration increases the time or difficulty of servicing the product; or e) to repair damage or malfunction resulting from failure to perform user maintenance and cleaning at the frequency and as prescribed in the user manual.

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Users safety summary

Terms in manual:

CAUTION	Conditions that can result in damage to the product.
WARNING	Conditions that can result in personal injury or loss of life.

Power source: Do not apply more than 250 volts RMS between the supply conductors or between either supply conductor and ground. Use only the specified power cord and connector. Refer to a qualified service technician for changes to the cord or connector.

Operation of product: Avoid electric shock by contacting a qualified service technician to replace fuses inside the product. Do not operate without the covers and panels properly installed. Do not operate in an atmosphere of explosive gases.

Safety instructions: Read all installation instructions carefully before you plug the product into a power source.

Terms on product:

CAUTION	A personal injury hazard exists that may not be apparent. For example, a panel may cover the hazardous area. Also applies to a hazard to property including the product itself.
DANGER	A personal injury hazard exists in the area where you see the sign.

Care of product: Disconnect the power plug by pulling the plug, not the cord. Disconnect the power plug if the power cord or plug is frayed or otherwise damaged, if you spill anything into the case, if product is exposed to any excess moisture, if product is dropped or damaged, if you suspect that the product needs servicing or repair, and whenever you clean the product.

Ground the product: Plug the three-wire power cord (with grounding prong) into grounded AC outlets only. If necessary, contact a licensed electrician to install a properly grounded outlet.

Symbols as marked on product:

DANGER high voltage:

Protective ground (earth) terminal:

Use caution. Refer to the manual(s) for information:

WARNING: If the product loses the ground connection, usage of knobs and controls (and other conductive parts) can cause an electrical shock. Electrical product may be hazardous if misused.

Contents

Chapter

1 Before You Begin

The Phaser 140 color printer lets you easily add color to your documents or presentations. The drivers and utilities on the diskettes shipped with your printer are designed to help you get the best printed results.

There are different ways to use the printer's features. Printer drivers are available for Macintosh and Windows applications, and downloadable utility files let you make selections and modify the printer's behavior. Most of the features in the drivers are also available from the printer's front panel. Refer to the tables on the following pages for details on the different ways to use the printer.

Note *If you are using a workstation and cannot use the PC-DOS diskette, refer to Chapter 4, "Printing from a UNIX Workstation," for instructions on obtaining the utility files from other sources.*

Using the printer's features

	Tektronix printer drivers	Downloadable utility files
When to use	■ **Macintosh driver**: Use with most Macintosh applications. ■ **Windows driver**: Use with most Windows applications.	■ Use to modify the printer, such as changing the printer's LocalTalk name, or downloading the error handler. ■ Print the color and font sampler charts.
Options/ Features	Driver selections override utility file and front panel selections for prints made from the driver. ■ Select media size (see page 5-2). ■ Select media type (see page 5-5). ■ Select Finepoint Sharpening image enhancement (see page 5-8). ■ Select TekColor color corrections (see page 6-4).	Many utility file selections affect all users. ■ Change the printer's name (see page 2-16 for Macintosh, or page 3-22 for PC). ■ Add Control-D characters to PC utility files (see page 3-23). ■ Print color sampler charts (see page 6-13). ■ Print font sampler charts (see page 7-3 for Macintosh, or page 7-5 for PC). ■ Download fonts (see page 7-4 for Macintosh, or page 7-6 for PC). ■ Use the Tektronix PostScript error handler (see page 8-8). ■ Reset the printer (see page 8-17). ■ Use the Setscreen Patch (see page 8-14).
Where to find	■ **Macintosh driver**: Located on the Macintosh Driver and Printer Utilities diskette (see page 2-1 for installation instructions). ■ **Windows driver**: Located on the Windows 3.1 Driver and Printer Utilities diskette (see page 3-3 for installation instructions).	■ **Macintosh utility files**: Located on the Macintosh Driver and Printer Utilities diskette (see page 2-12 for instructions on decompressing and using the files). ■ **PC utility files**: Located on the Windows 3.1 Driver and Printer Utilities diskette (see page 3-20 for instructions on using the files).

	Printer's front panel
When to use	■ For use with applications/platforms that don't use the Tektronix drivers. ■ For selecting features not available in the Tektronix drivers. ■ For selecting a color adjustment when printing the color sampler charts.
Options/ Features	Front panel selections affect all users. Exception: The ADJUST COLOR menu selections affect prints made from the Tektronix drivers only when the Use Printer Setting option is selected in the driver. ■ PRINT SAMPLES ■ ADJUST COLOR ■ SET MEDIA TYPE ■ SET FINEPOINT ■ SET STARTUP PAGE ■ SET PAGE SIZE ■ SET LANGUAGE ■ CLEAN HEADS ■ PICK FILLED AREA
Where to find	**Printer's front panel:** Use arrow keys and Select button to use menus. Refer to the Phaser 140 Color Printer User Manual for instructions.

Checking the diskettes

The printer is shipped with the following diskettes. Refer to the table below to locate information on the contents of a specific folder or directory.

Diskette	Folder/Directory	Contents	Where to find information
Macintosh Driver and Printer Utilities	Top (root) level	Contains the printer driver Installer program and related files.	page 2-1
	Phaser 140 Apps.sea*	Contains printer description files for use with specific applications.	page 2-17
	Phaser 140 Samplers.sea*	Contains files that print color sampler charts and a font sampler.	page 6-13 and page 7-3
	Phaser 140 Utilities.sea*	Contains utility files for use with the printer.	Chapter 2 Chapter 5 Chapter 7
	Phaser Screen Fonts.sea**	Contains screen fonts to match the printer's fonts.	page 7-1
AppleTalk Installer (for the Macintosh)	Top (root) level	Contains files for updating AppleTalk software.	page 8-7, and page 8-16
Windows 3.1 Driver and Printer Utilities	Top (root) level	Contains the files for installing the Tektronix Windows 3.1 driver.	page 3-1
	APPLSPEC	Contains printer description files for use with specific applications.	page 3-26
	PHSR140	Contains utility files for use with the printer.	Chapter 3 Chapter 4 Chapter 6 Chapter 7 Chapter 8
	SAMPLERS	Contains files that print color sampler charts and a font sampler.	page 6-13 and page 7-5
	WPD	Contains files for updating the standard Microsoft Windows PostScript driver for use with Tektronix printers.	page 3-14

*These are compressed archive files; refer to page 2-12 for decompressing instructions.
**This is a compressed archive file; refer to page 7-2 for decompressing instructions.

Chapter

2 Printing From a Macintosh

Using the Tektronix printer driver for the Macintosh

System requirements

The Tektronix printer driver for the Macintosh requires the following hardware and software:

- An Apple Macintosh II computer (or later)
- At least 4 Mbytes of memory
- System Software version 6.0.7, or 7.0 and higher

Installing the driver

The Phaser 140 driver is a Tektronix-modified version of Apple's LaserWriter 7.1.2 printer driver. This driver includes special paper sizes and TekColor color correction options not available in the standard LaserWriter driver. This installation procedure uses Apple's *Installer* program to load the software for the Phaser 140 Driver onto your computer's hard disk. The *Installer* also loads the LaserWriter 7.1.2 software if you are using system software 6.0.7.

If the printer is shared on a network, install the same version of the Tektronix driver on all Macintosh computers connected to the network.

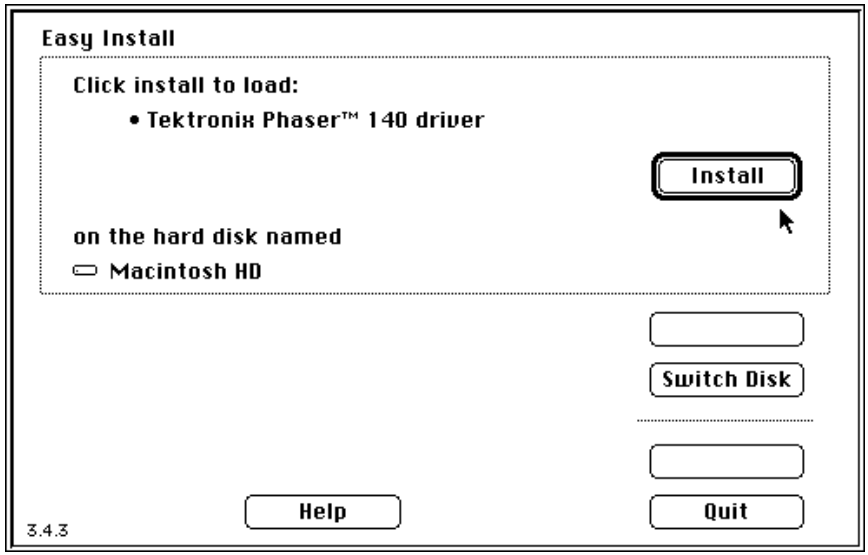
Note *LaserWriter 7.1.2 software is required to operate the Tektronix driver. It is automatically installed for system software 6.0.7 users. If you have system software 7.0 with LaserWriter 7.1.2 already installed, the Installer does not update these files.*

1. Make sure your Macintosh is powered up with system software version 6.0.7, or 7.0 or higher, installed.

2. Disable any virus protection programs you have running (some virus protection software interferes with the driver installation). To disable a virus protection program, hold down the **Shift** key and restart your computer by selecting **Restart** from the **Special** menu.

3. Insert the Macintosh Driver and Printer Utilities diskette into the disk drive. When the diskette appears on the desktop, you'll see several icons.

4. Double-click on the **Installer** icon to start the *Installer* program. Read the introduction screen, then click **OK**. You'll see **Easy Install** in the *Installer* window with the software listed.



5. Click the **Install** button. All the necessary printer software is automatically installed onto your hard disk.

6. Click the **Quit** button in the dialog box that appears.

7. Store the printer driver diskette in a safe place.

8. Re-enable your virus protection program.

9. If you want to rename the printer, refer to page 2-16 for instructions.

Selecting the printer in the Chooser

1. Select **Chooser** from the **Apple** menu.

2. Click the **Phaser 140** printer driver icon on the left side of the **Chooser**. A list appears with the printers you have connected to your Macintosh or printers that are available on a network. (If the printer driver icon does not appear, **Restart** your Macintosh, and repeat the printer driver installation procedure; also check the cable connections on your computer and printer.)

3. Click on the Tektronix printer you want in the list of printers on the right side of the **Chooser**.

4. Close the **Chooser** by clicking its close box.

Using the driver's options

Use the **Page Setup**, **Print**, and **TekColor Options** dialog boxes to select printing options. Refer to other chapters in this printing reference for instructions on performing common tasks with the driver.

Applications that use their own drivers

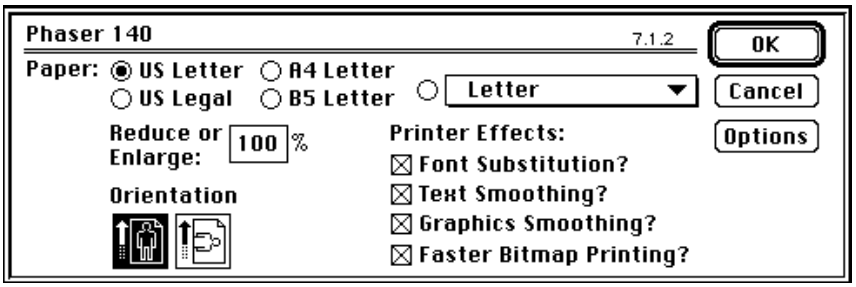
Some Macintosh applications, such as Aldus PageMaker 4.x and QuarkXPress, use their own printer drivers. The best way to obtain the TekColor color corrections on your prints is to use the Phaser 140 printer driver. For example, you can force PageMaker 4.x to use the Tektronix driver by holding down the **Option** key and choosing **Print** from the **File** menu. For other applications, refer to the software's documentation for the correct procedure. If you prefer to use the application's driver, refer to the *Phaser 140 Color Printer User Manual* for instructions on selecting color adjustments from the printer's front panel.

Extensions to the Print dialog box

Some applications add their own extensions to the Print dialog box. Refer to the application's documentation for information on extra options not described in this manual.

Making selections in the Page Setup dialog box

Choose **Page Setup** from the **File** menu to see the **Page Setup** dialog box. Make printer selections in the fields described in the following table.

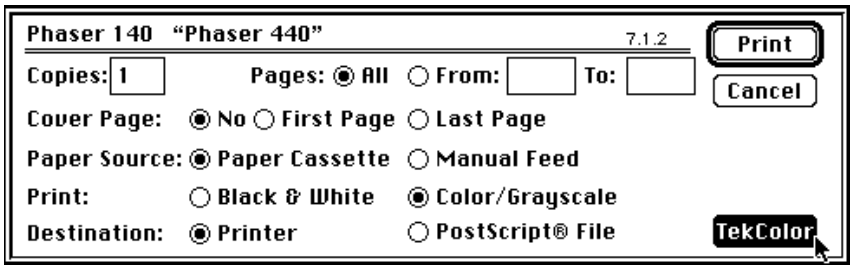


Page Setup dialog box options

Dialog box options	Option descriptions
Paper	Select a paper size from the pop-up menu. Refer to the table on page 5-2 for a list of paper sizes and image areas for your printer.
Reduce or Enlarge	Type in the percentage to reduce or enlarge your printed image.
Orientation	Select one of the following options to determine how an image is placed on the paper: ■ **Portrait** ■ **Landscape**
Printer Effects	Select one or more of the following options (refer to Apple's documentation for details on these options): ■ **Font Substitution** ■ **Text Smoothing** ■ **Graphics Smoothing** ■ **Faster Bitmap Printing**
Options button	Refer to Apple's documentation for details on the features in the Options dialog box.

Making selections in the Print dialog box

Choose **Print** from the **File** menu to see the **Print** dialog box. Make printer selections in the fields described in the following table.



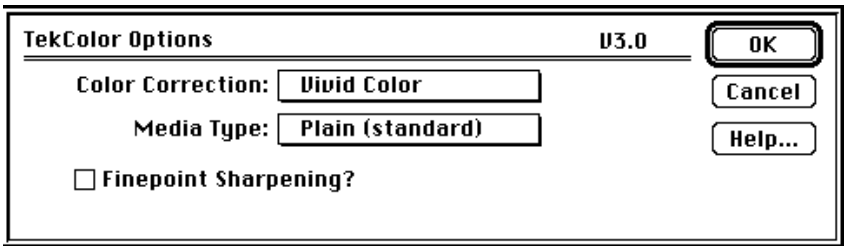
Print dialog box options

Dialog box options	Option descriptions
Copies	Type in the number of prints you want.
Pages	Type in the range of document page numbers you want printed, or select **All**.
Cover Page	Select one of the following options: ■ **No** ■ **First Page** ■ **Last Page**
Paper Source	This printer does not support manual feed; select **Paper Cassette**.
Print	Select one of the following options: ■ **Black & White:** to print in black-and-white only. ■ **Color/Grayscale*:** to print in color.
Destination	Select one of the following options: ■ **Printer**: To send a document to the printer. ■ **PostScript File**: To save a document to a file.
TekColor button	Click this button to see the **TekColor Options** dialog box.

*Select this option with **all** TekColor color correction options, including Monochrome.

Making selections in the TekColor Options dialog box

Click the **TekColor** button in the **Print** dialog box to see the **TekColor Options** dialog box. Make printer selections in the fields described in the following table. Refer to Chapter 5, "Selecting Media and Image Options," and Chapter 6, "Using Color," for details on these options.



TekColor Options dialog box options

Dialog box options	Option descriptions
Color Corrections	Select one of the following options: ■ **None** ■ **Vivid Color*** ■ **Simulate Screen** ■ **Simulate Press** ■ **Monochrome** ■ **Use Printer Setting**
Media Type	Select one of the following options ■ **Plain (draft)** ■ **Plain (standard)*** ■ **Plain (premium)** ■ **Coated Paper** ■ **Glossy Paper** ■ **Transparency** ■ **Back Print Film**
Finepoint Sharpening	Check box either on or off; the default setting is **off**.

*These are the factory default settings.

Using the LaserWriter 8.x printer driver

You can use Apple's LaserWriter driver version 8.x with a Phaser 140 printer. Some applications, such as Aldus PageMaker 5.0, use this driver instead of the Tektronix driver. The options you select in this driver's **Page Setup** and **Print** dialog boxes must be reselected for every print request.

Installing the LaserWriter 8.x driver

Note *During installation, the LaserWriter 8.x driver leaves other versions of the LaserWriter driver intact, so this driver can co-exist with the Tektronix driver.*

Refer to the LaserWriter driver's documentation, *LaserWriter 8.x Update Guide*, for instructions on installing the driver.

Using the LaserWriter 8.x driver with a Phaser 140

The LaserWriter 8.x driver uses printer-specific 4.x PPDs (PostScript printer description files) for information on a printer's page sizes, printing options, and media type options. To use the LaserWriter 8.x driver with a Phaser 140 printer, do the following steps. If the printer is busy, it may take some time to complete this configuration procedure; you may want to do this procedure when the printer is idle. You only have to configure a printer once.

1. The *Phaser 140 Apps.sea* archive file on the Macintosh Driver and Printer Utilities diskette contains printer description files for a Phaser 140 printer. Follow the instructions on page 2-12 to decompress these files, then continue with the steps below.

2. Locate the *4.x PPDs Folder* in the folder on your hard disk containing decompressed files. Open the folder and place the *TKPH1401.PPD* file with other PPDs for the LaserWriter 8.x driver in the *Printer Descriptions* folder, in the *Extensions* folder, inside the *System Folder*.

3. Open the **Chooser**.

4. Select the **LaserWriter 8.x** driver icon.

5. Select your printer from the list.

6. Still in the **Chooser**, click the **Setup** button to see a list of options.

7. In the dialog box that appears, click the **More Choices** button to see the full range of options.

8. Click the **Printer Info** button, then click the **Update info** button in the next dialog box.

9. Record the information on **PostScript Version** and **Total Memory Installed**; you will need this information later. Click **OK**.

10. Click the **Select PPD** button; the *Printer Descriptions* folder in the *Extensions folder*, inside the *System Folder*, is displayed.

11. Select the *TKPH1401.PPD* file. Make sure the information under **Printer Model** matches the printer you have and the **PostScript Version** information you got in Step 9.
Click **Select**.

Note *If the information under **Printer Model** is not an exact match, use the closest printer name, and call Tektronix Customer Support in the U.S. and Canada at 1-800-835-6100 for the latest PPD file. Outside the U.S. and Canada, contact your local Tektronix reseller. You can also download the latest PPD files from the Tektronix Bulletin Board Service (BBS); see page 8-1 for instructions.*

12. Click **Configure**. In the field for **Memory Configuration** under **Installable Options**, select the amount of memory your printer has installed. Check other options either **Installed** or **Not Installed,** as appropriate.

13. Click **OK** in two dialog boxes and close the **Chooser**.

14. Open the **Page Setup** dialog box to see a pop-up menu with all of the printer's supported paper sizes.

15. Open the **Print** dialog box and select **Paper Cassette**.

16. In the **Print** dialog box, click the **Options** button to see the **Print Options** dialog box. There are printer-specific **TekColor** features listed at bottom of the dialog box. Refer to Chapter 5, "Selecting Media and Image Options," and Chapter 6, "Using Color," for details on these options.

Auto Setup error message

If you click the **Auto Setup** button you may receive the following error message:

```
There is a problem with the PPD file
"filename".  Use "Select PPD" to choose
another Printer Description File.
```

The solution is to change the PPD file name (*TKPH1401.PPD*) to match the "filename" specified in the error message. Locate the PPD file on your hard disk. Highlight the name and type in the new name.

Using the Macintosh utility files

The Macintosh Driver and Printer Utilities diskette contains compressed archive files with **.sea** extensions. These compressed files each contain a group of files. For example, the *Phaser 140 Utilities.sea* file contains the printer utility files for performing such tasks as enabling the error handler. You need to decompress an entire archive file onto your hard disk, then delete the individual files you don't want to use.

- *Phaser 140 Apps.sea* contains the printer description files described on page 2-11.
- *Phaser 140 Samplers.sea* contains the color sampler charts described on page 6-13, and the font sampler described on page 7-3.
- *Phaser 140 Utilities.sea* contains the utility files described in several places in this manual.
- *Screen Fonts.sea* contains the screen fonts described on page 7-1.

Decompressing the Macintosh utility files

Note *Refer to page 7-2 for special instructions on decompressing the* ***Screen Fonts.sea*** *archive file and installing fonts.*

1. Insert the Macintosh Driver and Printer Utilities diskette into your computer's disk drive.
2. Double-click on a compressed file with a **.sea** extension.
3. At the **Self-Extracting Archive** dialog box, click **Continue**.
4. In the dialog box, select the location, such as your hard drive, where you want the decompressed files saved.
5. At the prompt `Install software as:` you are asked to name the folder where you want the decompressed files saved. Use either the default folder name listed in the edit box or type in the name you want for the folder. Then click **Save**.
6. At the **Installation was successful** dialog box, click **Quit**.

   The contents of the decompressed file are saved in the folder you specified and are ready for use.

Sending files to the printer

The utility files change the way the printer operates. First, decompress the archive file from the diskette to a folder on your hard disk. Install the Tektronix driver (or a LaserWriter driver) and select the appropriate printer in the Chooser, then send the files to the printer. There are two ways to send files to the printer: self-sending files, and using the LaserWriter Utility to download files.

Using self-sending files

Certain Macintosh files, designated by a self-sender arrow icon, are automatically sent to the currently selected printer when you double-click on the icon. Most of the files in the *Phaser 140 Samplers.sea* and *Phaser 140 Utilities.sea* archive files are self-sending.

After double-clicking on the self-sender icon, a dialog box appears with the name and a short description of the file you selected and the printer you are sending the file to. Select **Cancel** or **OK** from this dialog box to continue. Refer to the following table for a list of self-sending files.

Self-sending files	**For details on this file**
CMYK Sampler	see page 6-13
RGB Sampler	see page 6-13
HSB Sampler	see page 6-13
Fonts Sampler	see page 7-3
Setscreen Patch	see page 8-14
Tek Error Handler	see page 8-8

Using the LaserWriter Utility to send files to the printer

If the file does not have the self-sending icon, use the *LaserWriter Utility* to send the file to the printer. The *LaserWriter Utility* is an Apple utility you use on the Macintosh to send PostScript files and fonts to the printer.

Note *The **LaserWriter Utility** cannot be used if the printer is connected to a print server. See your system administrator to temporarily remove the printer from the print server to download the **PANTONE-Tek Phaser 140** file, the **Reset Printer** file, and to change the printer's LocalTalk/EtherTalk name.*

The following files are not self-sending; use the *LaserWriter Utility* to send these files to the printer:

Downloadable files	For details on this file
PANTONE-Tek Phaser 140 (46-page PANTONE color sampler chart)	see page 6-18
Reset Printer	see page 8-17

1. Follow the instructions on page 2-12 to decompress the *Phaser 140 Utilities.sea* archive file on the Macintosh Driver and Printer Utilities diskette to a folder on your hard disk.
2. Install the Tektronix driver according to instructions on page 2-1.
3. Select the appropriate printer in the **Chooser**.

4. Locate the *LaserWriter Utility* in the folder of decompressed files. Double-click on the **LaserWriter Utility** icon to start the application.

5. Select **Download PostScript File** from the **Utilities** menu.

6. Select the file you want sent to the printer, and click **Open**.

7. At the prompt `Save PostScript output as:` you are asked for a file name for saving printer output. Use the default name given in the edit box or type in a new name. Then click **Save** to send the file to the printer. (Printer output includes status messages generated by the printer reporting such conditions as out of paper.)

8. If no output is returned by the printer, the *LaserWriter Utility* displays a dialog box; click **OK** in the box to continue.
If output is returned by the printer, you won't see this dialog box; check your hard disk for the file the utility created for the printer's output.

Changing the printer's name

This procedure lets you change the printer's LocalTalk name. If the printer is also connected through EtherTalk, the name change is applied to both LocalTalk and EtherTalk names. The name selected here prints on the startup page and appears in the **Chooser**. The name can be up to 31 characters long, and may contain any printable characters except @ (at sign) and : (colon). The default printer name is **Phaser 140**. A change is persistent across printer power cycles.

1. The *LaserWriter Utility* is compressed into the *Phaser 140 Utilities.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use it. Follow the instructions on page 2-12 to decompress this file, then continue with the steps listed below.

2. Select the appropriate printer in the **Chooser**.

3. Locate the *LaserWriter Utility* file in the folder on your hard disk containing decompressed utility files. You may want to place this utility in a *Utilities* folder, or leave the utility on your desktop if you use it often.

4. Double-click on the **LaserWriter Utility** icon.

5. Select **Name Printer** from the **Utilities** menu. The currently selected printer is listed in the dialog box. Type the new name in the edit box.

6. Click the **Rename** button.

7. At the confirmation dialog box, click **OK**.

8. Open the **Chooser** to reselect the printer with its new name.

Printing from an application

Note *For hints and tips on printing from a specific application, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.*

The *Phaser 140 Apps.sea* archive file on the Macintosh Driver and Printer Utilities diskette contains printer description files for your printer. Follow the instructions on page 2-12 to decompress these files. These printer description files are required by some applications; *refer to your application's documentation to determine if you need to use one or more of these files*.

You should always use the most current printer description file. To determine the **date** of the file you are using, select (highlight) the file and choose **Get Info** from the **File** menu. Then check the Tektronix Bulletin Board Service (BBS) for the most current printer description files. Refer to page 8-1 for instructions on using the BBS.

A few applications and their corresponding printer description files are listed in the table below; refer to the following pages for details on each printer description file.

Printer Description Files for the Phaser 140

Application and version number	Printer Description File
Aldus PageMaker 4.0 or 4.01	Tek Phaser 140.APD*
Aldus PageMaker 4.2 (use both PPD and PDX)	TKPH1401.PPD (version 3.0) TKPH1401.PDX
Aldus PageMaker 4.2A (use both PPD and PDX)	TKPH1401.PPD (version 3.0) TKPH1401.PDX
Aldus PageMaker 5.0	TKPH1401.PPD (version 4.x)
Aldus FreeHand 2.0	Tek Phaser 140.APD*
Aldus FreeHand 3.0 or 3.1 (use both PPD and PDX)	TKPH1401.PPD (version 3.0) TKPH1401.PDX
Aldus FreeHand 4.0	TKPH1401.PPD (version 4.x)
QuarkXPress 3.11, 3.2, 3.3	Phaser 140.PDF
Canvas 3.0	TKPH1401.PPD (version 3.0)

*An APD file is not shipped with the printer. Check the Tektronix Bulletin Board Service (BBS) for an APD file, or call Tektronix Customer Support; refer to page 8-1 for instructions.

Printer description files for Aldus, Adobe, and other applications

There are 3.0 and 4.x versions of the PPD files; use the version required by your application. Each version is located in a separate folder. However, if you need to check the file's version number (3.0 or 4.x), open the file in a text editor and check the ***FormatVersion** line near the beginning of the file.

Applications that use 3.0 PPD files also use PDX files.

The PPD and PDX files are compressed into the *Phaser 140 Apps.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use them. Follow the instructions on page 2-12 to decompress these files, then continue with the steps listed below for the application version you are using.

Aldus PageMaker 4.2 and 4.2A
Aldus FreeHand 3.0 and 3.1
Canvas 3.0

The *TKPH1401.PDX* file and the *TKPH1401.PPD* file in the *3.0 PPDs* folder are PostScript Printer Description files for use with Aldus, Adobe, and other applications. Refer to your application's documentation to see if this is the version PPD you should use.

- Place the 3.0 PPD file and the PDX file with your other PPD files on your hard disk according to application needs. Typically, PPD files are located in the *PPDs* folder, in the *Aldus* folder, inside the *System Folder*. Refer to your application's documentation for details. This file is used automatically by applications that require the information.

- If you are using Canvas 3.0, drag the 3.0 PPD file and PDX file into the *PPDs* folder on your computer's hard disk. The *PPDs* folder may be found in the *Canvas* folder if you don't have any Aldus applications.

Aldus PageMaker 5.0 and Aldus FreeHand 4.0

The *TKPH1401.PPD* file in the *4.x PPDs* folder is a PostScript Printer Description file for use with Aldus, Adobe, and other applications. Refer to your application's documentation to see if this is the version PPD you should use.

- The 4.x PPD file is provided for support of future applications and may not work with current applications that require the 3.0 PPD file. Refer to your application's documentation to see which version of the PPD file you should use.
  Do not use this 4.x PPD file unless your application requires it.

- Place the 4.x PPD file with your other PPD files on your computer's hard disk according to application needs. Typically, PPD files are located in the *Printer Descriptions* folder, in the *Extensions* folder, inside the *System Folder*. Refer to the application's documentation for details.

- If you are using the LaserWriter 8.x printer driver, place the 4.x PPD file in the *Printer Descriptions* folder, in the *Extensions* folder, inside the *System Folder*.

Printer description file for QuarkXPress

The *Phaser 140.PDF* is a PostScript Printer Description file for QuarkXPress 3.11, 3.2, and 3.3. QuarkXPress lets you install support for additional printers beyond those shipped with the application. This file adds the Phaser 140 printer to the QuarkXPress list of supported printers.

The *Phaser 140.PDF* file is compressed into the *Phaser 140 Apps.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use it. Follow the instructions on page 2-12 to decompress this file, then continue with the steps listed below for the application version you are using.

Note *For hints and tips on printing from QuarkXPress, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.*

QuarkXPress 3.11 and 3.2

1. Locate the *Phaser 140.PDF* file in the folder on your hard disk containing decompressed utility files.
2. Place the *Phaser 140.PDF* file in the same folder as the QuarkXPress application on your computer's hard disk.
3. The printer's name appears alphabetically in the list of installed printers in the QuarkXPress custom **Page Setup** dialog box.

QuarkXPress 3.3

1. Locate the *Phaser 140.PDF* file in the folder on your hard disk containing decompressed utility files.
2. Place the *Phaser 140.PDF* file in the *PDF* folder inside the QuarkXPress 3.3 application folder on your computer's hard disk.
3. The printer's name appears alphabetically in the list of installed printers in the QuarkXPress custom **Page Setup** dialog box.

PANTONE Color template for Adobe Illustrator

Note *For the latest information on color libraries, call Tektronix Customer Support in the U.S. and Canada at 1-800-835-6100. Outside the U.S. and Canada, contact your local Tektronix reseller.*

The *PANTONE-Tek Phaser 140.ai* file lets you customize PANTONE Colors for Adobe Illustrator and Phaser 140 printers. This file is application-specific and printer-specific.

The *PANTONE-Tek Phaser 140.ai* file is compressed into the *Phaser 140 Apps.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use it. Follow the instructions on page 2-12 to decompress these files, then continue with the steps listed below for the application version you are using.

Adobe Illustrator 3.0

1. Locate the *PANTONE-Tek Phaser 140.ai* file in the folder on your hard disk containing decompressed utility files.
2. Drag the *PANTONE-Tek Phaser 140.ai* file to the *Illustrator* application folder on your hard disk.
3. Use this file as a template to create documents for printing.

Adobe Illustrator 5.0

1. Locate the *PANTONE-Tek Phaser 140.ai* file in the folder on your hard disk containing decompressed utility files.
2. Drag the *PANTONE-Tek Phaser 140.ai* file to the *Illustrator* application folder on your hard disk.
3. Choose **Import Styles** from the **File** menu and import the *PANTONE-Tek Phaser 140.ai* file.

PANTONE Color library files for Aldus applications

Note *For the latest information on color libraries, call Tektronix Customer Support in the U.S. and Canada at 1-800-835-6100. Outside the U.S. and Canada, contact your local Tektronix reseller.*

The *PANTONE-Tek Phaser 140.clib* and *PANTONE-Tek Phaser 140.acf* files are compressed into the *Phaser 140 Apps.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use them. Follow the instructions on page 2-12 to decompress these files, then continue with the steps listed below for the application version you are using.

FreeHand 3.0 and 3.1

The *PANTONE-Tek Phaser 140.clib* file is used by the application to properly specify PANTONE Colors for Aldus FreeHand and Phaser 140 printers. This file is application-specific and printer-specific.

For FreeHand 3.0, refer to the *Aldus FreeHand User Manual Version 3.0 for Apple Macintosh computers* for more information on color libraries.

For FreeHand 3.1, refer to the *Aldus FreeHand Guide to Installation, System 7.0 Compatibility, and Feature Updates: Version 3.1 for Apple Macintosh computers* for more information on color libraries.

1. Locate the *PANTONE-Tek Phaser 140.clib* file in the folder on your hard disk containing decompressed utility files. Place the file in a convenient location.

2. Start FreeHand.

3. Open the **Colors** palette in FreeHand (or press **Command + 9**).

4. **For FreeHand 3.0:** Choose **Library** from the **Colors** palette submenu; a dialog box appears listing available color libraries.

   For FreeHand 3.1: Choose **Import** from the **Colors** palette submenu; a dialog box appears listing available color libraries.

5. Select and open the *PANTONE-Tek Phaser 140.clib* color library file. A dialog box appears with a list of available colors.

6. Select color type, either **Process** or **Spot**.

7. Select the colors you want to use, then click **OK**. Select one color at a time, or hold down the shift key and click to select several colors, or press **Command + A** to select all colors in the list.

   Selected colors are added to the **Colors** palette, the **Colors** dialog box, and all **Colors** pop-up menus.

FreeHand 4.0

The *PANTONE-Tek Phaser 140.acf* file is used by the application to properly specify PANTONE Colors for Aldus FreeHand and Phaser 140 printers. This file is application-specific and printer-specific.

1. Locate the *PANTONE-Tek Phaser 140.acf* file in the folder on your hard disk containing decompressed utility files. Place the file in a convenient location.

2. Start FreeHand.

3. From the **Colorlist** window choose **Options**, **Import** and select *PANTONE-Tek Phaser 140.acf*.

PageMaker 5.0

The *PANTONE-Tek Phaser 140.acf* file is used by the application to properly specify PANTONE Colors for Aldus PageMaker and Phaser 140 printers. This file is application-specific and printer-specific.

1. Locate the *PANTONE-Tek Phaser 140.acf* file in the folder on your hard disk containing decompressed utility files.

2. Place the *PANTONE-Tek Phaser 140.acf* file in the **Color** folder in the **Aldus** folder, inside the **System Folder**.

3. Start PageMaker.

4. Choose **Element**, **Define Colors**, **New, Libraries**, then select *PANTONE-Tek Phaser 140.acf*.

Chapter

3 Printing From a PC

Using the Tektronix printer driver for Windows

System requirements

The Tektronix Windows printer driver requires the following hardware and software:

- An IBM or compatible PC, with a 386, or higher, processor.
- One floppy-disk drive (3.5-inch drive with 1.44-Mbyte capacity), and a hard disk.
- Two Mbytes of memory.
- MS-DOS 5.0 operating system, or higher, and Windows version 3.1.

Accessing on-line help

On-line help is available in two ways:

- For general Windows 3.1 information about printers and setting options, select **Help** from the **Control Panel** menu bar and choose a topic from the **Help** menu. A **Help** window appears, offering information on the selected topic and listing other related topics.
- The Tektronix driver uses the Microsoft help file *PSCRIPT.HLP*. This file comes with the Microsoft PostScript driver and must be installed before you can use **Help**. After installing this file, you can get information about the Tektronix driver by choosing **Help** in the **Setup** dialog box. (Access this dialog box through the **Printers** then the **Printers-Configure** dialog boxes.)

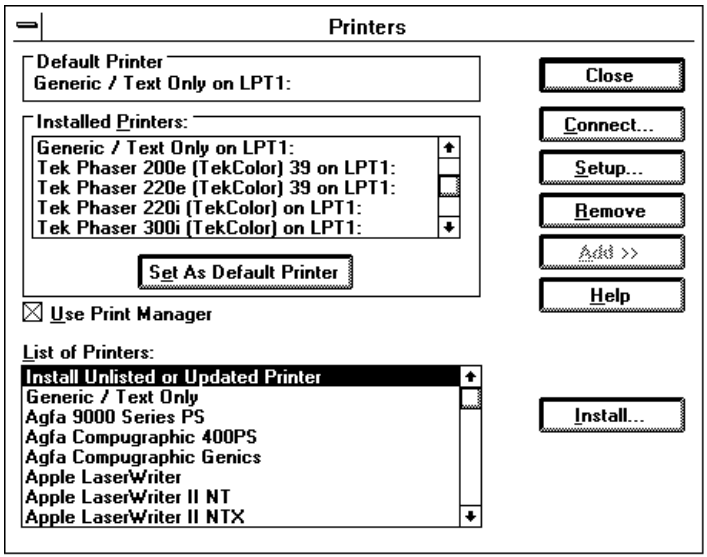
Do you already have Tektronix printers installed?

If you have any Tektronix printers that were installed with the older Tektronix *Installer* program, and if you have the obsolete TekColor PS Previewer software installed, you can remove the old files to clean up your hard disk. Then, you can use the latest Tektronix Windows driver to reinstall all of your Tektronix printers with the latest driver software. For instructions on this procedure, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.

Installing the driver

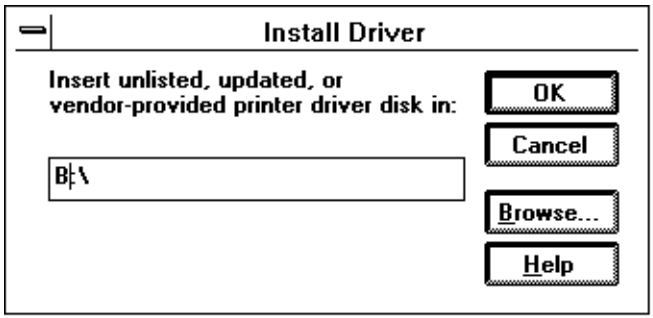
The Tektronix Windows driver is a Windows PostScript driver customized for Tektronix printers. These instructions assume a basic familiarity with Windows operation and terminology. For additional information about Windows, refer to your Microsoft Windows documentation.

1. Insert the Tektronix Windows 3.1 Driver and Printer Utilities diskette into your computer's disk drive, for example, drive **B:**.
2. Start **Windows**.
3. Open the **Control Panel**. Double-click on the **Printers** icon; the **Printers** dialog box appears.
4. Select the **Add>>** button.
5. In the **List of Printers**, select **Install Unlisted or Updated Printer**.

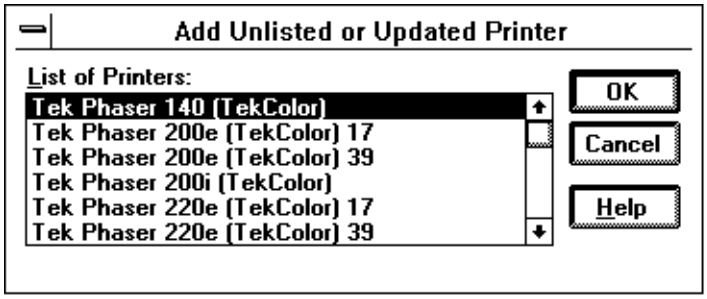


6. Select the **Install** button.

7. Type in the drive containing the PC diskette, for example, drive **B:**, and select the **OK** button.



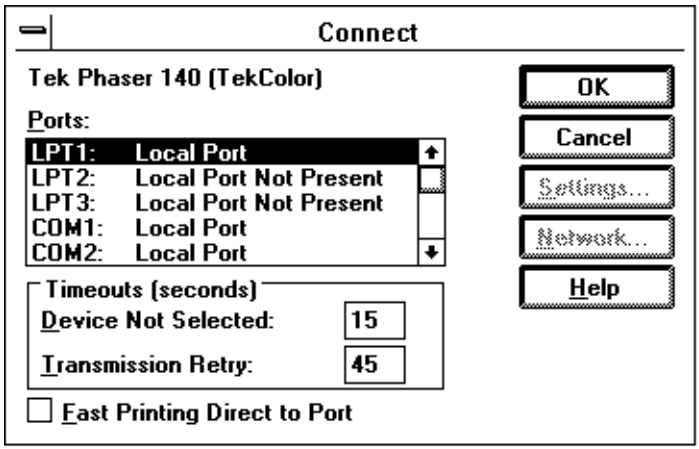
8. Select your printer and choose **OK**.



The driver software you need is automatically installed. Continue with "Configuring the driver" on page 3-5.

Configuring the driver

1. The **Printers** dialog box should already be displayed; if not, double-click the **Printers** icon in the **Control Panel**.
2. Choose your printer from the list of installed printers.
3. Choose the **Set As Default Printer** button if you want to select your printer as the default.
4. Choose the **Connect** button; the **Connect** dialog box appears.



5. Select the port the printer is connected to. Your printer is connected to your computer through one of the computer's communications ports. You need to tell the driver which port your printer uses so the driver can print your documents.

   Connect the printer either through the parallel port or through one of the optional network ports. Refer to the *Phaser 140 Color Printer User Manual* for connection instructions.

   The port **FILE:** lets you send a PostScript document to a file instead of to the printer. For more information about communication ports, refer to your Windows documentation.

Note *The printer's configuration page contains information you may need to set up the printer's network port. Refer to the* ***Phaser 140 Color Printer User Manual*** *for instructions on using the front panel to print the configuration page.*

- **For a parallel port setup in Windows:** Select your parallel (LPT) port in the list.
- **For a network port setup in Windows:** Select your network port in the list. Choose the **Network** button to see the **Printers-Network Connections** dialog box. Fill in each item according to your configuration, then choose the **OK** button. Refer to your Windows documentation for details, or ask your network administrator for help.

6. Set the **Timeouts**. These options regulate your computer's communications with its printer ports.

   - **Device Not Selected:** Type a value of **0**, or between **15** and **999**, in this text box to change the number of seconds Windows waits before notifying you that a printer is off-line. The default is **15** seconds.

   - **Transmission Retry:** On large or multiple page documents you may see an Alert message that the printer is no longer accepting data before the job is completely downloaded to the printer. When using the Print Manager with a shared printer, you should set this option to a larger value, such as **850** to avoid these unnecessary timeouts. Type a value between **45** and **850** in this text box; the default setting is **45** seconds.

7. Choose the **OK** button to return to the **Printers** dialog box, then choose the **Setup** button. A dialog box appears with the name of the printer you selected across the top. Use this dialog box to select paper source, paper size and image orientation.

8. Choose the **Options** button to see the **Options** dialog box. Check the **Color** box to print in color.

9. From the **Options** dialog box, choose the **Advanced** button to see the **Advanced Options** dialog box. Make sure the **Use PostScript Level 2 Features** check box is checked *on*. Choose the **OK** button to return to the **Options** dialog box.

Note *The **Use PostScript Level 2 Features** option affects the print time of bitmapped (raster) images by improving the image transfer time from the computer to the printer, and by improving the image processing time in the printer. This option is only available to applications that use this Tektronix driver with Tektronix PostScript Level 2 printers, such as the Phaser 140. When this box is checked, the **Compress Bitmaps** option is unavailable (grayed out).*

10. In the **Options** dialog box, choose the **Printer Features** button to see the **Tektronix Printer Features** dialog box. Make color correction, media type, and Finepoint Sharpening selections as desired. Choose the **OK** button to return to the **Options** dialog box.

11. Choose the **OK** button to return to the dialog box that lists your printer's name across the top.

12. Choose the **OK** button to return to the **Printers** dialog box.

13. Choose the **Close** button.

If you are using PC/NFS

If you have PC/NFS software installed on your computer, you need to make the following selection in the **Network Options** dialog box:

1. From the **Main** window, double-click the **Print Manager** icon.

2. From the **Options** menu in the **Print Manager**, select **Network Settings**.

3. In the **Network Options** dialog box, uncheck the **Print Net Jobs Direct** box.

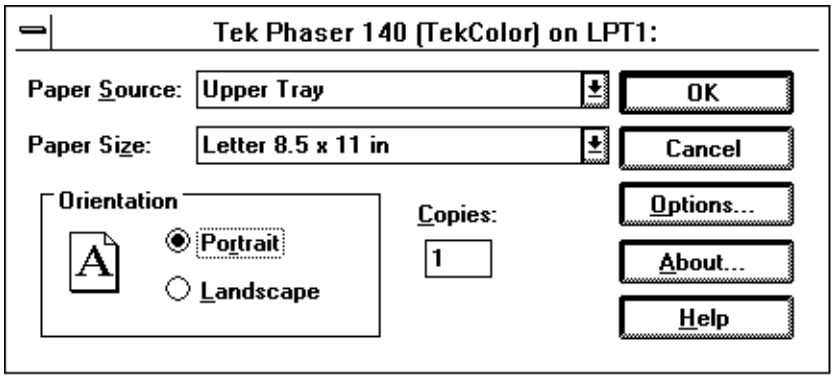
4. Choose the **OK** button.

Using the driver's options

Use the following dialog boxes to select printing options.

Making selections in the Setup dialog box

To reach the **Setup** dialog box without running an application, open the **Control Panel**, double-click on the **Printers** icon, then choose the **Setup** button. Make printer selections in the fields described in the following table.

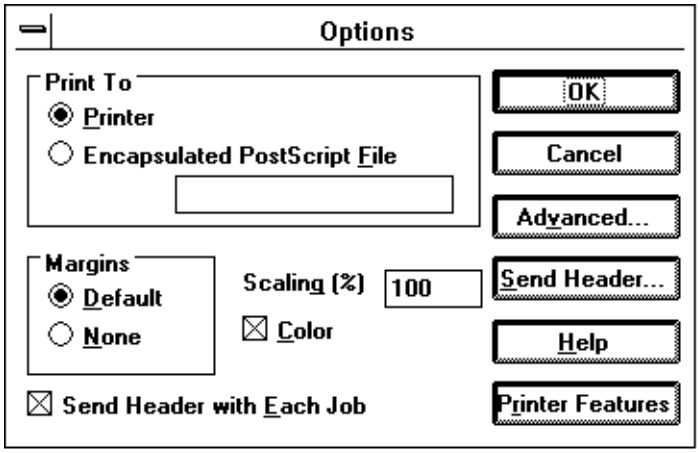


Setup dialog box options

Dialog box options	Option description
Paper Source	Select the **Upper Tray** option.
Paper Size	Select a paper size from the pop-up menu. Refer to the table on page 5-2 for a list of paper sizes and image areas for your printer.
Orientation	Select one of the following options to determine how an image is placed on the paper: ■ **Portrait** (vertical) ■ **Landscape** (horizontal)
Copies	Type in the number of copies (prints) you want. (You may want to set the number of copies from your application because the number of copies in the Setup dialog box remains the same until you change it again.) If you are printing multiple copies, make sure the Transmission Retry (described on page 3-7) is set for at least 600 seconds (10 minutes).

Making selections in the Options dialog box

From the **Setup** dialog box, choose the **Options** button to see the **Options** dialog box. Refer to your Microsoft Windows documentation for details on the options in this dialog box. Make printer selections in the fields described in the following table.

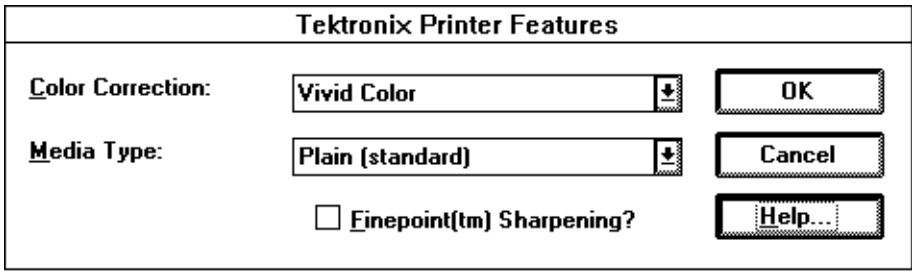


Options dialog box options

Dialog box options	Option descriptions
Print To	Select one of the following options: ■ **Printer** ■ **Encapsulated PostScript File** (This option generates an EPS graphic that can be imported into other applications. This option does **not** create a printable file. For printing to a file, refer to page 3-6 for selecting the port FILE.)
Scaling	Type in a percentage value to scale the printed image.
Margins	Select one of the following options: ■ **Default** ■ **None**
Color	Check this box **on** to print in color.
Send Header with Each Job	This box must be checked **on**. (The Header contains important PostScript information that must accompany each print job; it is not a banner page printed with each job. If this box is not checked, an error message is displayed on your computer screen and your job does not print.)
Printer Features button	Choose this button to see the **Tektronix Printer Features** dialog box.

Making selections in the Tektronix Printer Features dialog box

From the **Options** dialog box, choose the **Printer Features** button to see the **Tektronix Printer Features** dialog box. Make printer selections in the fields described in the following table. Refer to Chapter 5, "Selecting Media and Image Options," and Chapter 6, "Using Color," for details on these options.



Tektronix Printer Features dialog box options

Dialog box options	Option description
Color Correction	Select one of the following options: ■ **None** ■ **Vivid Color*** ■ **Simulate Screen** ■ **Simulate Press** ■ **Monochrome** ■ **Use Printer Setting**
Media Type	Select one of the following options: ■ **Plain (draft)** ■ **Plain (standard)*** ■ **Plain (premium)** ■ **Coated Paper** ■ **Glossy Paper** ■ **Transparency** ■ **Back Print Film**
Finepoint Sharpening	Check this box either on or off; the default setting is **off**.

*These are the factory default settings.

Installing the Tektronix driver on a network

Note *For more information on the following procedure, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.*

1. Install the Tektronix Windows driver as described on page 3-3.
2. Edit the *CONTROL.INF* file as follows to make the driver available to other users:
   a. Start **Notepad**, or a similar text editor.
   b. Insert the Tektronix Windows 3.1 Driver and Printer Utilities diskette into your computer's disk drive, for example drive **B**.
   c. In **Notepad**, open the *CONTROL.ADD* file on the Tektronix diskette.
   d. Locate the entries for Tektronix Phaser printers. Select your printer (highlight the line with your printer), and copy the line to the **Clipboard** by selecting **Copy** from the **Edit** menu. If desired, you can select and copy all of the Tektronix printers listed.
   e. In **Notepad**, open the *CONTROL.INF* file located in the network Windows System directory, by selecting **Open** from the **File** menu.
   f. Search for the string *Phaser* to find the existing Tektronix printer entries.
   g. Paste the printer information from the **Clipboard** into the *CONTROL.INF* file above the existing Tektronix printer entries, by selecting **Paste** from the **Edit** menu.

h. If desired, the existing Tektronix printer entries can be deleted or commented-out by placing a semicolon (;) at the beginning of each line. It might be less confusing to users to have only one Tektronix printer to choose from in the driver.

3. Windows users can add the Tektronix printer to their Printers Control Panel with the ADD button.

Updating the standard Microsoft Windows PostScript driver

If you prefer to use the standard Microsoft Windows PostScript printer driver instead of the Tektronix Windows driver, follow these instructions. This update procedure provides printer page size information for Windows applications using the standard Microsoft driver. However, color corrections and other PostScript Level 2 features are available only with the Tektronix Windows 3.1 driver and are not supported by the standard Microsoft driver. Refer to the *Phaser 140 Color Printer User Manual* for instructions on selecting color adjustments from the printer's front panel.

These instructions assume a basic familiarity with Windows operation and terminology. For additional information about Windows, refer to your Microsoft Windows documentation.

Note *If you want to install the Tektronix Windows driver, follow the instructions on page 3-3.*

1. Start Windows.
2. Open the **Control Panel**.
3. Double-click on **Printers** icon.
4. Choose the **Add>>** button; a list of printers is displayed.
5. Select **Install Unlisted or Updated Printer**.
6. Choose the **Install** button.
7. When prompted, insert the Tektronix Windows 3.1 Driver and Printer Utilities diskette into your computer's disk drive.
8. Type in the disk drive location of the diskette, and type in the *\WPD* subdirectory on the diskette:

   ```
   B:\WPD
   ```

   Then choose **OK.**

9. Choose your printer from the list, then choose the **OK** button.

Note *Printers using the Tektronix driver for Windows have (TekColor) listed in their name. Printers without this designation are using the standard Microsoft Windows PostScript driver and the WPD file.*

10. When asked to insert a disk with the updated *PSCRIPT.DRV* file, enter the path for your *Windows\System* directory, or insert the appropriate Microsoft Windows diskette, so the current *PSCRIPT.DRV* file is used. (The *PSCRIPT.DRV* file is *not* included on the Tektronix diskettes.)

Updating a Windows NT PostScript driver

If you are using Microsoft Windows NT, follow these instructions to print to the Phaser 140. This update procedure provides printer page size information for Windows NT applications. However, TekColor color corrections and other PostScript Level 2 features are not supported by the Windows NT driver. Refer to the *Phaser 140 Color Printer User Manual* for instructions on selecting color adjustments from the printer's front panel. Refer to your Microsoft Windows NT documentation for details on features in the Windows NT driver.

These instructions assume a basic familiarity with Windows NT operation and terminology. For additional information about Windows NT, refer to your Microsoft Windows NT documentation.

Note *You may need your original Windows NT setup diskettes (or CD-ROM) to complete this procedure if you need to install a PostScript printer in Step 3 below.*

1. Start your system with **Windows NT**.
2. If your computer platform has an Intel-compatible processor, go on to Step 3.

   If your computer platform is a MIPS or Alpha, you need to edit the *PRINTER.INF* file in the *APPLSPEC\PPD4.x* directory on the Tektronix Windows 3.1 Driver and Printer Utilities diskette.

   a. The Tektronix Windows 3.1 Driver and Printer Utilities diskette is write-protected. To edit the *PRINTER.INF* file, copy the following files from the Tektronix diskette to a new, formatted floppy diskette.
   Place all three files at the top (root) level of the new diskette.

      TEK1 (from the top level of the Tektronix diskette)
      PRINTER.INF (from the *APPLSPEC\PPD4.x* sub-directory)
      TKPH1401.PPD (from the *APPLSPEC\PPD4.x* sub-directory)

   b. Open the copy of the *PRINTER.INF* file on the new diskette in a text editor such as **Notepad**.

c. Locate the following section in the file:
```
[ProductType]
STF_PLATFORM = I386
```

d. Replace the **I386** with either **MIPS** (for a MIPS platform) or **Alpha_AXP** (for an Alpha platform).

e. Save the *PRINTER.INF* file.

3. From the **Main** window, double-click on the **Print Manager** icon.

4. If you don't have a PostScript printer installed, install one now. If you do have one installed, go on to Step 5.

   a. From the **Printer** menu, select **Create Printer**; the **Create Printer** dialog box appears.

   b. Under **Driver**, scroll through the list and select a PostScript printer, such as the Apple LaserWriter NT, and choose the **OK** button.

   c. Follow the on-line instructions to install the driver files from your Windows NT CD-ROM or diskettes.

5. Install the Tektronix Phaser 140 printer. From the **Printer** menu, select **Create Printer**; the **Create Printer** dialog box appears.

6. Under **Driver**, scroll to the end of the list and select **Other**; the **Install Driver** dialog box appears.

7. When prompted, insert either the Tektronix Windows 3.1 Driver and Printer Utilities diskette, or the new diskette you created in Step 2, into your computer's disk drive.

8. If you are using the Tektronix Windows 3.1 Driver and Printer Utilities diskette: Type in the disk drive location of the diskette and change to the *APPLSPEC\PPD4.x* directory. Choose **OK**; the **Select Driver** dialog box appears.

   If you are using an edited copy of the *PRINTER.INF* file from Step 2: Type in the disk drive location of the diskette. Choose **OK**; the **Select Driver** dialog box appears.

9. Under **Printer Driver**, choose your Phaser 140 printer from the list, then choose the **OK** button.
10. In the **Windows NT Setup** dialog box, type in the same path you used in Step 8 (for example, *B:\APPLSPEC\PPD4.x*), and choose the **Continue** button; the **Noncritical Error** dialog box appears.
11. When you are prompted for the location of the *PSCRPTUI.DLL* file and the *PSCRIPT.DLL* file, choose the **Ignore** button. (These files were installed in the procedure in Step 4 or were already installed.)
12. When you are returned to the **Create Printer** dialog box, fill in the other fields as desired, then choose the **OK** button; the **PostScript Printer Setup** dialog box appears.
13. Select options in the **PostScript Printer Setup** dialog box. Enabling the **Use Printer Halftoning** option is recommended. Then choose the **OK** button; the **Windows NT Setup** dialog box appears.
14. If you had to install a PostScript printer in Step 4, follow this procedure to delete it.
    a. Select the printer you want to remove.
    b. From the **Printer** menu, select **Remove Printer.**
    c. At the prompt, choose the **OK** button to remove the selected printer.

Note *Use the following page sizes with the Phaser 140: Letter, A4, and Legal.*

Printing from DOS

Note *Driver-selectable TekColor color correction features are available only though the Tektronix drivers for Macintosh computers and the Windows environment as described in this manual. To obtain TekColor corrections with another driver, you must use the printer's front panel.*

Printing from a driver

Many DOS applications include printer drivers for Tektronix printers. Check the application you are using for a printer driver for a Phaser 140. Install and use the driver according to the application's documentation.

If the application you are using does not have a driver for the Phaser 140, check to see if other Tektronix Phaser series printers are listed, and choose one of those. Otherwise, you can use a generic color PostScript printer driver. However, generic drivers do not have information on the printer's page sizes and image areas, and images may be clipped or shifted when printed.

If your application does not have a driver for use with your printer, contact the application's vendor, or call Tektronix Customer Support in the U.S. and Canada at 1-800-835-6100, for printing information. Outside the U.S. and Canada, contact your local Tektronix reseller.

Refer to the *Phaser 140 Color Printer User Manual* for information on using the DOS **MODE** command to disable timeouts on a parallel port.

Using color corrections

DOS drivers do not include the TekColor color correction options. Refer to the *Phaser 140 Color Printer User Manual* for instructions on selecting color corrections from the printer's front panel.

Using the PC utility files

The utility files change the way the printer operates. To use the files, send them to the printer from the communications port your printer is connected to. You can use either the DOS method or the Windows method described below.

Downloading files from DOS

You can use the DOS **COPY** command to download PostScript files to the printer.

1. Locate the files you want to use on the Windows 3.1 Driver and Printer Utilities diskette. You can copy the files to your computer's hard disk, or use the files directly from the diskette.

2. Use the DOS **COPY** command to send the desired file to the printer.

   For example, to reset the printer you would send the *RESET.PS* file to the printer. If your printer is connected to the parallel (LPT) port, type the following command (where *x* is 1, 2, or 3):

   ```
   COPY RESET.PS LPTx:
   ```

   If your printer is connected to a Novell or TCP/IP network, you should follow the instructions provided with your network software.

Downloading files from Windows

You can use the **Copy** command in the **File Manager** in Windows to download PostScript files to the printer.

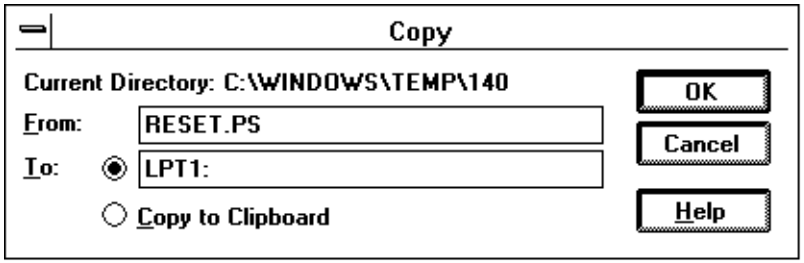
1. Locate the files you want to use on the Windows 3.1 Driver and Printer Utilities diskette. You can copy the files to your computer's hard disk, or use the files directly from the diskette.

2. In Windows, double-click the **File Manager** icon in the **Main** window.

3. Locate the drive and directory or sub-directory location of the printer's utility files.

4. Select the utility file you want to send to the printer, for example *RESET.PS*.

5. From the **File** menu, select **Copy**. The **Copy** dialog box appears with the utility file you selected listed in the **From** field.



6. In the **To** field, type the port your printer is connected to. For example, type **LPT1:** for a parallel port connection.
Choose the **OK** button.

7. If the **Confirm File Replace** dialog box appears, choose the **Yes** button to continue.
The file is downloaded to the printer.

Changing the printer's name

This procedure lets you change the printer's LocalTalk name. If the printer is also connected through EtherTalk, the name change is applied to both LocalTalk and EtherTalk names. The name selected here prints on the startup page. The name can be up to 31 characters long, and may contain any printable characters except @ (at sign) and : (colon). The default printer name is **Phaser 140**. A change is persistent across printer power cycles.

1. Locate the *PRNTNAME.PS* file in the *PHSR140* directory on the Windows 3.1 Driver and Printer Utilities diskette.

2. Copy the file to your hard disk for editing.

3. View the *PRNTNAME.PS* file in a text editor.

4. Edit the file to substitute a different printer name for **(My Printer Name)** in the **/PrinterName** line.

5. **PC users**: Use the DOS **COPY** command to send the file to the printer. For example, to send the file to the parallel port, type the following at the DOS prompt:

   ```
   COPY  filename  LPT1:
   ```

   Workstation users: Send the file to the printer as you would any PostScript file.

Note *Some text editors add a carriage return or line feed after the last Control-D character in a file you are editing. If your computer is connected to the printer through the parallel port, the extra characters will start a new job and the printer times out after a few minutes. To avoid this, copy the* ***CTRLD.PS*** *file to the printer after you send the* ***PRNTNAME.PS*** *file; see page 3-23 for more information on the* ***CTRLD.PS*** *file.*

Adding Control-D characters to PC files

The *ADDCTRLD.BAT* and *CTRLD.PS* files are located in the *PHSR140* directory on the Windows 3.1 Driver and Printer Utilities diskette. These files are included for users who want to write their own PostScript files.

Note *If your computer is connected to the printer through the parallel port, you need to have Control-D characters in your utility files or in the files you create. However, if your computer is connected to a network such as NetWare or TCP/IP, you should not add Control-D characters to a utility file.*

The non-text Control-D character is required at the end of PostScript files sent to the printer's parallel port; it signals "end-of-job." A Control-D should precede and follow most PostScript data files. *ADDCTRLD.BAT* and *CTRLD.PS* help you add two Control-D characters to your files.

ADDCTRLD.BAT

ADDCTRLD.BAT is a batch file that adds a Control-D to the beginning and the end of a file. Use this file if you are creating your own PostScript files.

To use *ADDCTRLD.BAT*, copy *ADDCTRL.BAT* and *CTRLD.PS* to the same directory on your hard disk. Type the following command:

```
ADDCTRLD filename
```

where *filename* is the name of the file that needs Control-D characters.

CTRLD.PS

CTRLD.PS contains some PostScript comments plus the Control-D character. Copy *CTRLD.PS* to the beginning and/or end of your PostScript files before you send them to the printer. (PostScript utility files on the Windows 3.1 Driver and Printer Utilities diskette already have Control-D characters at the beginning and end.) You can send *CTRLD.PS* to the printer by itself to make sure the printer is in the "end of job" condition.

Setting PostScript job and wait timeouts

The *CONFIG.PS* file changes the PostScript job and wait timeout values. Changes are persistent across print jobs but not across printer power cycles.

- The **wait timeout** is the amount of time in seconds the printer waits for data to come from the computer during a job. If the printer pauses for longer than the specified number of seconds, the job is discarded. If the value is exceeded, a *timeout* error is generated, and the job is canceled.
- The **job timeout** is the amount of time any single job may be active before it must print. If the value is exceeded, a *timeout* error is generated, and the job is canceled.

Note *The **manual feed timeout** is not used on this printer.*

Note *This file affects printer operation. If the printer is shared on a network, using this file may affect the prints requested from other users.*

1. Locate the *CONFIG.PS* file in the *PHSR140* directory on the Windows 3.1 Driver and Printer Utilities diskette.
2. The default values for the printer are **0** seconds for the job timeout and **40** seconds for the wait timeout. A timeout value of **0** indicates no timeout; the printer waits indefinitely.

   To change *CONFIG.PS* to specify different timeouts, substitute new values for **0** and **40** in the **JobTimeOut** and **WaitTimeOut** lines. Permitted timeout values are as follows:

   - **JobTimeOut**: 0 to 999
   - **WaitTimeOut**: 0, or 15 to 999
   - To specify no timeout, use **0**

Note *To avoid timeouts or job cancellation on Windows multiple-page or multiple-copy print jobs, you may want to set the* ***WaitTimeOut*** *to a high value or to 0 (zero).*

In the following example, the timeouts are set to their default values.

```
4 dict begin
   /Password      () def
   /JobTimeOut     0 def
   /WaitTimeOut   40 def
currentsystemparams /ManualFeedTimeout known
{ /ManualFeedTimeout 60 def } if
currentdict end setsystemparams
```

3. **PC users**: Use the DOS **COPY** command to send *CONFIG.PS* to the printer. If the printer is connected to the parallel (LPT) port, enter the following command:

```
COPY CONFIG.PS LPT1:
```

Workstation users: Send the file to the printer as you would any PostScript file.

Printing from an application

Note *For hints and tips on printing from a specific application, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.*

Printer description files are located in the *APPLSPEC* directory on the Windows 3.1 Driver and Printer Utilities diskette. These files are required by some applications; *refer to your application's documentation to determine if you need to use one or more of these files*.

You should always use the most current printer description file. To determine the **date** of the file you are using, open the file in a text editor. Then check the Tektronix Bulletin Board Service (BBS) for the most current printer description files. Refer to page 8-1 for instructions on using the BBS.

A few applications and their corresponding printer description files are listed in the table below; refer to the following pages for details on each printer description file.

Printer Description Files for the Phaser 140

Application and version number	Printer Description File
Aldus PageMaker 4.0, 4.2, 4.2A (use both PPD and PDX)	TKPH1401.PPD (version 3.0) TKPH1401.PDX
Aldus PageMaker 5.0	TKPH1401.PPD (version 4.x)
Aldus FreeHand 3.0 or 3.1 (use both PPD and PDX)	TKPH1401.PPD (version 3.0) TKPH1401.PDX
Aldus FreeHand 4.0	TKPH1401.PPD (version 4.x)
QuarkXPress 3.3 (requires Windows 3.1)	TKPH1401.PDF

Printer description files for Aldus, Adobe, and other applications

There are 3.0 and 4.x versions of the PPD files; use the version required by your application. Applications that use 3.0 PPD files also use PDX files.

Aldus PageMaker 4.0, 4.2 and 4.2A
Aldus FreeHand 3.0 and 3.1

The *\PPD3.0* subdirectory in the *APPLSPEC* directory on the Windows 3.1 Driver and Printer Utilities diskette contains the version 3.0 *TKPH1401.PPD* file and the *TKPH1401.PDX* file that are required by some Windows applications, such as Aldus FreeHand and PageMaker.

To use these files, copy them to the directory on your computer's hard disk where other PPD files are located. For example, the subdirectory in FreeHand's File Manager containing printer description files should be called *ALDUS\USENGLSH\PPDS*. Refer to your application's documentation for details on using printer description files.

Aldus PageMaker 5.0 and Aldus FreeHand 4.0

The *\PPD4.x* subdirectory in the *APPLSPEC* directory on the Windows 3.1 Driver and Printer Utilities diskette contains the version 4.x *TKPH1401.PPD* printer description file. This file is provided for support of Windows applications, such as newer Aldus applications.

To use this file, copy it to the directory on your hard disk where other PPD files are located. For example, the subdirectory in FreeHand's File Manager containing printer description files should be called *ALDUS\USENGLSH\PPD4*. Refer to your application's documentation for details on using printer description files.

Printer description file for QuarkXPress

The *TKPH1401.PDF* file is for use with Quark 3.3 and Windows 3.1. To install the file, copy *TKPH1401.PDF* from the Windows 3.1 Driver and Printer Utilities diskette into the *PDF* subdirectory of the Quark 3.3 application. For example:

```
COPY TKPH1401.PDF C:\XPRESS33\PDF
```

PANTONE Color library file for Adobe Illustrator

Note *For the latest information on color libraries, call Tektronix Customer Support in the U.S. and Canada at 1-800-835-6100. Outside the U.S. and Canada, contact your local Tektronix reseller.*

The *TEK_140.AI* file is located in the *APPLSPEC* directory, on the Windows 3.1 Driver and Printer Utilities diskette. This file lets you customize PANTONE Colors for Adobe Illustrator and a Phaser 140 printer. This file is application-specific and printer-specific.

Adobe Illustrator 3.0 and 4.02

1. Copy the *TEK_140.AI* file to your computer's hard disk, for example, to Adobe Illustrator's *Color* directory.
2. Start the Illustrator program.
3. Open the file or image you want to use.
4. From the **File** menu, select the **Open** command.
5. In the dialog box that appears, locate the directory and file location of the *TEK_140.AI* file, and open the file.
6. When you are working on an image, use the **Paint** menu and either the **Paint Style** or **Custom Color** commands to select PANTONE Colors.

PANTONE Color library file for Aldus applications

Note *For the latest information on color libraries, call Tektronix Customer Support in the U.S. and Canada at 1-800-835-6100. Outside the U.S. and Canada, contact your local Tektronix reseller.*

FreeHand 3.0 and 3.1

The *TEK_140.CLB* file is located in the *APPLSPEC* directory, on the Windows 3.1 Driver and Printer Utilities diskette. This file is used by the Aldus FreeHand application to properly specify PANTONE Colors for a Phaser 140 printer. This file is application-specific and printer-specific.

1. Copy the *TEK_140.CLB* file to your computer's hard disk, for example, to the FreeHand application's directory.
2. Open FreeHand.
3. **In FreeHand 3.0:** Choose **Library** from the **Colors** palette submenu; a dialog box appears listing available color libraries.

   In FreeHand 3.1: Choose **Import** from the **Colors** palette submenu; a dialog box appears listing available color libraries.
4. Select and open the *TEK_140.CLB* color library; a dialog box appears with a list of available colors.
5. Select the colors you want to use, then click **OK**. Selected colors are added to the **Colors** palette, the **Colors** dialog box, and all **Colors** menus.

PageMaker 5.0

The *TEK_140.ACF* file is located in the *APPLSPEC* directory, on the Windows 3.1 Driver and Printer Utilities diskette. This file is used by the application to properly specify PANTONE Colors for Aldus PageMaker and the Phaser 140 printer. This file is application-specific and printer-specific.

1. Copy the *TEK_140.ACF* file from the Windows 3.1 Driver and Printer Utilities diskette to your hard disk.
2. Place the file in the *usenglsh\color* directory in the *Aldus* application directory.
3. Start PageMaker.
4. Choose **Element**, **Define Colors**, **New, Libraries**, then select the Phaser 140 printer.

PANTONE Color palette file for CorelDRAW!

Note *For the latest information on color libraries, call Tektronix Customer Support in the U.S. and Canada at 1-800-835-6100. Outside the U.S. and Canada, contact your local Tektronix reseller.*

The *TEK_140.PAL* file is located in the *APPLSPEC* directory, on the Windows 3.1 Driver and Printer Utilities diskette. This file is used by the CorelDRAW! application to properly specify PANTONE Colors for a Phaser 140 printer. This file is application-specific and printer-specific.

1. Copy the *TEK_140.PAL* file to your computer's hard disk, for example, to the Corel application's directory.
2. Open CorelDRAW!.
3. Open the document file you want to work in.
4. Select the item you want filled with a PANTONE Color, then select the **Fill tool** icon (paint bucket).
5. Select the **Fill tool** icon again, then select the **Open** button under **Palette**.
6. In the dialog box under **Path**, specify the location of the *TEK_140.PAL* file.
7. Under **Files**, select the *TEK_140.PAL* file and select the **Load** button.

Chapter

4 Printing from a UNIX Workstation

Printing

You can send print files from your workstation to the Phaser 140 as you would to any PostScript printer, for example, an Apple LaserWriter. Workstation users can print from any application that generates PostScript Level 1 or Level 2.

For more information on printing from a workstation, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.

To use the TekColor color corrections and other printer features, use the menus on the printer's front panel; refer to the *Phaser 140 Color Printer User Manual* for instructions.

Using the utility files

For some printer features you can use the downloadable utility files available on the Windows 3.1 Driver and Printer Utilities diskette. To mount the diskette, refer to the instructions on page 4-4. If you cannot use this diskette, refer to page 4-6 for instructions on obtaining the files from other sources. The utility files perform such tasks as changing the printer's name, resetting the printer, and using an error handler. The utility files on the Windows 3.1 Driver and Printer Utilities diskette for PC/DOS are written in the PostScript Level 2 programming language, and in a few cases you may have to edit the files to change the default parameters.

About Control-D characters

Over the parallel port, a Control-D character is used to indicate the end of a file. Without a Control-D character in the file, the printer will continue waiting for more input. All PostScript utility files, except *RESET.PS*, must end with a Control-D character when sent from a workstation over a parallel interface. In the file descriptions, Control-D is denoted as **CTRL-D**. For more information about PostScript programming, refer to the *PostScript Language Reference Manual*, second edition, Adobe Systems Incorporated.

If your workstation is connected to an Ethernet network such as NetWare or TCP/IP, you should delete the Control-D characters from each utility file you plan to use.

Removing Control-D characters from utility files

1. Locate the *delctrld* UNIX shell script in the *PHSR140* directory on the Windows 3.1 Driver and Printer Utilities diskette for PC/DOS. You must copy this file to your workstation before you can use it. (Or, obtain this shell script through one of the methods described on page 4-6.)

2. To remove all Control-D characters from a file, type the following command:

   ```
   delctrld filename1.ps filename2.ps
   ```

   where *filename1.ps* is the utility file you want to remove Control-D characters from, and *filename2.ps* is the revised file with a new name. (Both *filename1.ps* and *filename2.ps* can have the same name, but the original file will be overwritten by the revision.)

3. Send the utility file to the printer as you would any PostScript file.

Adding Control-D characters to utility files

1. Locate the *addctrld* UNIX shell script in the *PHSR140* directory on the Windows 3.1 Driver and Printer Utilities diskette for PC/DOS. You must copy this file to your workstation before you can use it. (Or, obtain this shell script through one of the methods described on page 4-6.)

2. To add Control-D characters to the beginning and end of a file, type the following command:

   ```
   addctrld filename1.ps filename2.ps
   ```

   where *filename1.ps* is the utility file you want to add Control-D characters to, and *filename2.ps* is the revised file with a new name. (Both *filename1.ps* and *filename2.ps* can have the same name, but the original file will be overwritten by the revision.)

3. Send the utility file to the printer in the usual manner.

Mounting the PC/DOS diskette on a workstation

Note *The following procedures give instructions for mounting the PC/DOS diskette on SGI IRIX versions 4.0.x and 5, and Sun running Solaris 2.3. For instructions on mounting the diskette on a Sun OS 4.1.3, request document number 9501 from HAL, the automated fax system. Refer to page 8-2 for instructions.*

SGI IRIX versions 4.0.x and 5

PC/DOS-formatted diskettes can be easily mounted in the SGI environment. For more information, print out the appropriate **man** pages on your system.

IRIX version 4.0.x uses the *msdosd* daemon to mount a floppy diskette. IRIX version 5 uses the *mediad* daemon to mount all types of devices, including floppy diskettes. Both operating system versions have the utilities *from_dos* and *to_unix* to convert files and add or remove Control-M characters.

To mount a diskette, insert the diskette into the disk drive.

msdosd

The *msdosd* daemon monitors a floppy diskette drive. When a diskette is inserted, it is mounted appropriately if it is in MS-DOS format. To specify a floppy disk drive, use the appropriate device special file in **`/dev/rdsk`**. High-density diskettes are mounted by using floppy devices with the *hi* suffix.

mediad

The *mediad* daemon monitors the removable media devices on a system. When a diskette is inserted, it is mounted if it makes sense for that media type and if there is a valid *filesystem* on it.

Sun running Solaris 2.3

PC/DOS-formatted diskettes can be mounted in two ways in the Solaris environment, either automatically or manually. For more information, print out the appropriate **man** pages on your system.

Automatic diskette mounting instructions

If the volume manager is running, the PC/DOS diskette will be mounted automatically when the diskette is inserted in the disk drive.

To see if the volume manager is running, type the following command:

```
ps -ef | grep vold
```

To see a list of the diskette's contents, do the following steps:

1. Run **OpenWindows**.
2. Open the **File Manager**.
3. Insert the PC/DOS diskette.
4. Click on the **File** button in the **File Manager** window, then click on **Check for Floppy**.

   The **File Manager** displays the files on the diskette. You can then copy the files to your hard disk, or send the files to the printer using the **lp** print command.

Manual diskette mounting instructions

If the volume manager is not running, you can manually mount the PC/DOS diskette. Type the following command:

`mount -F pcfs` *device-special directory-name*

Or, if the device name **`/dev/diskette - /pcfs pcfs -no-`** is in your **`/etc/vfstab`** directory, type the following command to mount the diskette:

```
mount /pcfs
```

You can then copy the files to your hard disk, or send the files to the printer.

Obtaining the PC utility files

There are two ways to get the utility files if you cannot mount the PC/DOS diskette:

- Refer to page 8-5 for instructions on using the INTERNET to download Tektronix files.
- Refer to page 8-1 for instructions on using the Tektronix Bulletin Board Service.

Chapter

5

Selecting Media and Image Options

This chapter explains how to select media size, media type, and image orientation from the Tektronix printer drivers. You can also select media size and media type from the printer's front panel; the image orientation option is only available through the Tektronix drivers. You can also check your application's documentation for instructions on selecting paper size and orientation. Refer to Chapter 2, "Printing From a Macintosh," or Chapter 3, "Printing From a PC," for information on opening driver dialog boxes.

Selecting paper size

The **Paper** (Macintosh) or **Paper Size** (Windows) options in the Tektronix drivers let you choose the paper size you want to print on. The drivers support both US and metric media sizes. The default is **Letter** (8.5 x 11 inches). Refer to the *Phaser 140 Color Printer User Manual* for information on loading the media trays.

Phaser 140 special paper sizes

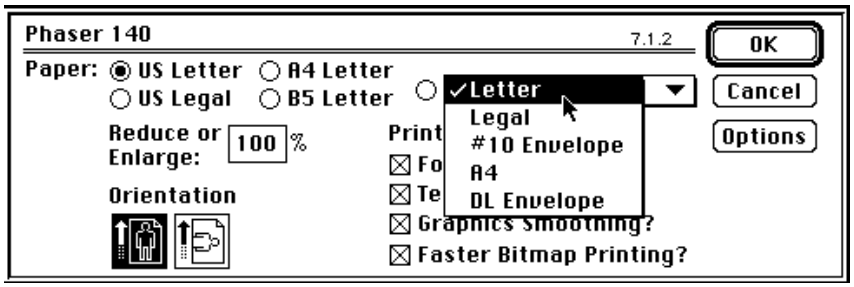
Paper sizes	Dimensions	Image area
Letter	8.5 x 11 ins.	8.09 x 10.4 ins.
A4	210 x 297 mm	199.8 x 281.8 mm
Legal	8.5 x 14 ins.	8.09 x 13.4
#10 Envelope	9.5 x 4.125 ins. (241 x 105 mm)	8.09 x 3.43 ins. (205.5 x 87.1 mm)
Envelope DL	8.67 x 4.33 ins (220 x 110 mm)	8.09 x 3.63 ins. (205.5 x 92.3 mm)
Smallest custom page size	6 x 4 ins. 152.4 x 101.6 mm	5.6 x 3.4 ins. 142.2 x 86.4 mm
Largest custom page size*	8.5 x 22 ins. 241.3 x 558.8 mm	8.09 x 21.4 ins. 205.5 x 543.6 mm

*Custom page sizes between 8.5 x 11 inches and 8.5 x 14 inches require 4 Mbytes of additional memory; sizes between 8.5 x 14 inches and 8.5 x 22 inches require 16 Mbytes of additional memory. Refer to the Phaser 140 Color Printer User Manual for ordering information. If you don't have enough memory installed for a custom page size, your printed image may be clipped.

Caution *If the printer is loaded with paper narrower than the size requested in the driver (or from the front panel), excess ink is printed on the platen inside the printer. If this occurs, refer to the* ***Phaser 140 Color Printer User Manual*** *for cleaning instructions.*

Macintosh driver

Note *If you are using a PPD-driven printer driver for the Macintosh, such as a LaserWriter 8.x driver, you may be able to specify custom page sizes. Refer to the driver's documentation for instructions.*

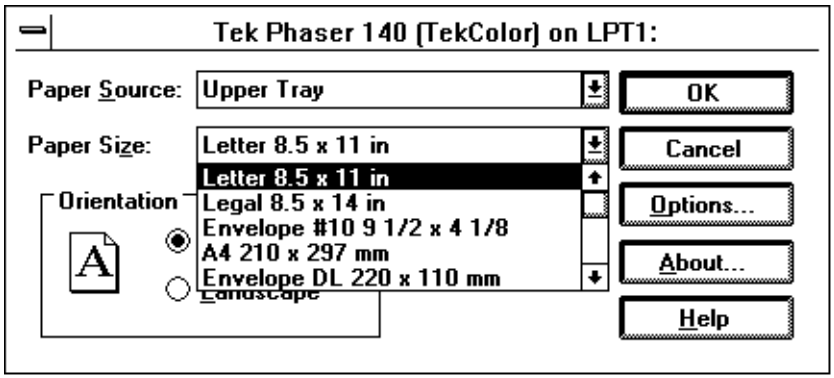


The **Paper** options are in the **Page Setup** dialog box. The first four selections are the standard LaserWriter paper sizes (US Letter, US Legal, A4 Letter, and B5 Letter). The fifth **Paper** option field is a pop-up menu with both Macintosh and special Tektronix paper sizes. The printer's maximum image area is not available with the standard LaserWriter paper sizes; use the Tektronix page sizes in the pop-up menu to print the maximum image area. Refer to the table on page 5-2 for image area information. Refer to your Apple documentation for details on the other LaserWriter driver features in this dialog box.

Some applications override the Tektronix page sizes with their own extensions to this dialog box. These application-specific page sizes use page size and image area information about the Tektronix printer from the printer description files. Refer to "Printing from an application" on page 2-17 for information on these files.

Windows driver

The **Paper Size** options are in the **Printer Setup** dialog box. All paper sizes listed may not be available for every Windows application. For example, Excel 3.0 can print only on the paper sizes listed in its own **Page Setup** dialog box. Custom page sizes are available through the Windows driver; refer to your Windows documentation for instructions.



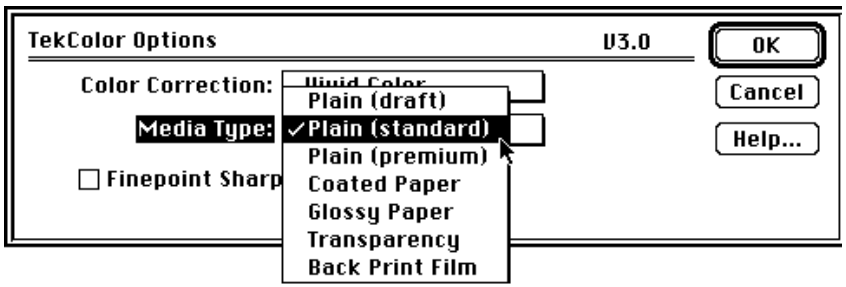
Selecting media type

Each **Media Type** option in the Tektronix Macintosh and Windows printer drivers produces the best printed results on a specific media type. Select the option that matches the type of media you are printing on. When you are using plain paper, you can choose between three speed/quality modes.

Media Type options	Option descriptions	Suggested uses
Plain (draft)	This option provides the fastest printing on plain paper, and in many cases uses less ink. This option automatically turns off Finepoint Sharpening.	Correspondence, memos, envelopes, draft copies, reports, schedules, sales targets
Plain (standard)	This option provides improved print quality on plain paper; the print time is increased over Plain (draft). This option is the default.	
Plain (premium)	This option provides the best print quality on plain paper; the print time is increased over Plain (standard).	
Coated Paper	This option produces the best print quality on Tektronix coated paper.	Presentation handouts, newsletters, report covers, agendas, press releases
Glossy Paper	This option produces the best print quality on Tektronix glossy paper.	Photographs, advertising flyers, promotions, coupons, Real Estate properties, illustrations, graphic art layouts, product information sheets, charts, daily specials, trade show announcements
Transparency	This option produces the best print quality on Tektronix transparency film.	Overhead presentations, clear overlays
Back Print Film	This option produces the best print quality on Tektronix back print film. Image is printed in reverse (mirrored) to appear on the back side of clear media.	Posters, retail signs, advertisements, lighted display boxes, notices, maps, safety information, name badges, card tents, menus

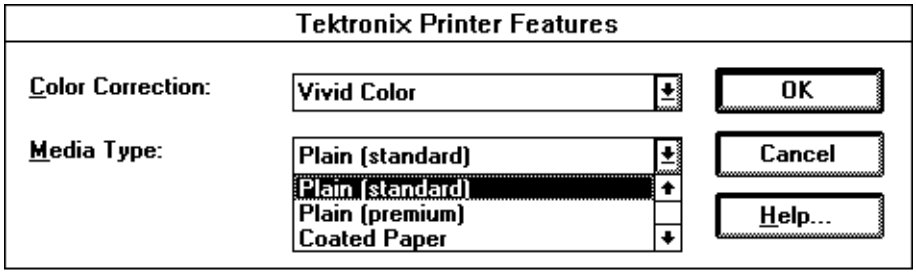
Macintosh driver

The **Media Type** options are in the **TekColor Options** dialog box.



Windows driver

The **Media Type** options are in the **Tektronix Printer Features** dialog box.



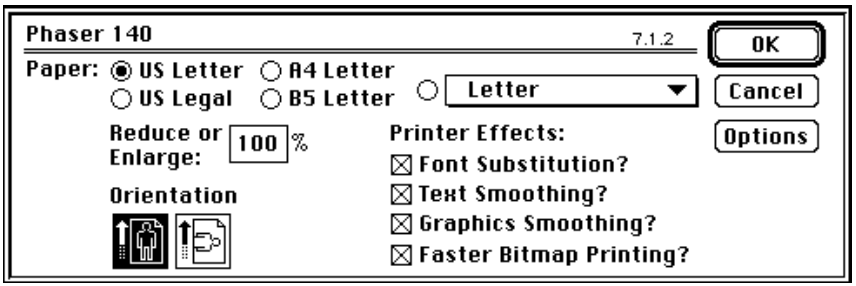
Selecting image orientation

The **Orientation** option in the Tektronix Macintosh and Windows printer drivers lets you choose the direction in which your document is placed on the paper. Refer to your *Phaser 140 Color Printer User Manual* for more information on image placement and paper loading. Select the orientation option you want for your prints.

- **Portrait**: Places your image vertically on the media.
- **Landscape**: Places your image horizontally on the media.

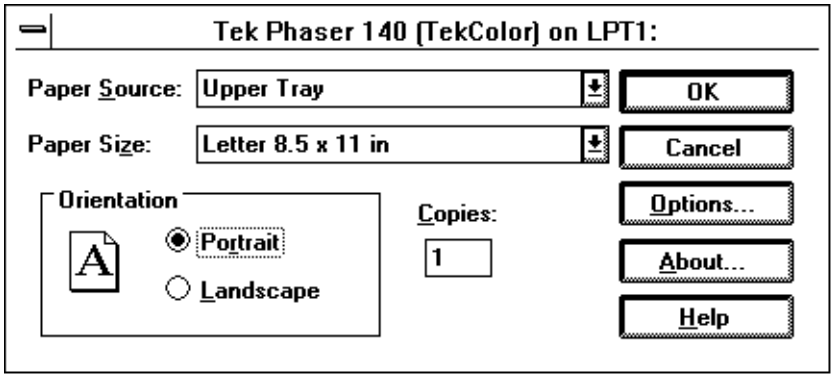
Macintosh driver

The **Orientation** option is in the **Page Setup** dialog box.



Windows driver

The **Orientation** option is in the **Setup** dialog box.



Enhance image detail (Finepoint Sharpening)

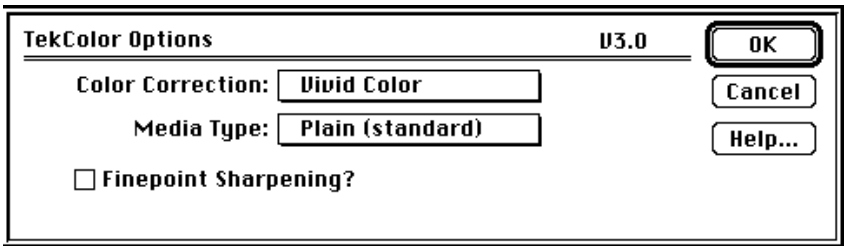
Finepoint Sharpening uses a special halftoning technique to produce sharp images with crisp edges and smooth color detail for bitmap or scanned image data.

Use Finepoint Sharpening to sharpen or enhance fine detail in bitmapped (rasterized) images only. Bitmapped images can be created in paint programs, and any scanned photograph or picture becomes a bitmapped image. Finepoint Sharpening works best with natural images, such as scanned photographs, with lots of detail, texture, and muted (less intense or saturated) colors. The Finepoint Sharpening options is also available through the printer's front panel.

Note *Finepoint Sharpening is automatically turned off when you select* ***Plain (Draft)*** *under Print Quality.*

Macintosh driver

The **Finepoint Sharpening** option is in the **TekColor Options** dialog box. Check the box *on* or *off*.



Windows driver

The **Finepoint Sharpening** option is in the **Tektronix Printer Features** dialog box. Check the box *on* or *off*.

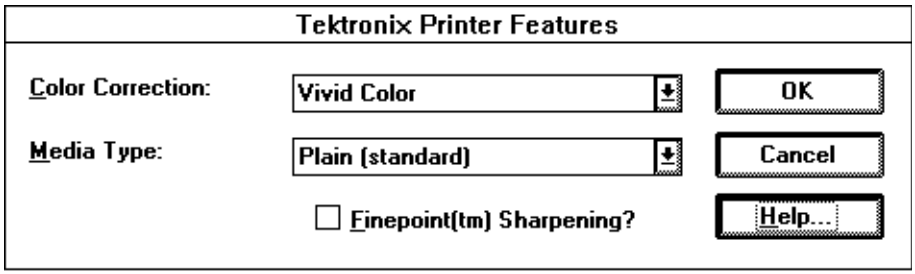


Image requirements for Finepoint Sharpening

Note *Outline graphics and text in the same picture are **not** adjusted.*

Bitmapped images must meet the following requirements:

- The edges of the bitmapped image must align with (or be parallel to) the edges of the paper. That is, an image can only be rotated in multiples of 90 degrees, and it can be inverted or mirrored.
- The bitmapped image must be rectangular.
- If you specify a clippath shape (also called clipping path, mask, or masking) around an area in an image, it must be a rectangle and the edges of the clippath must align with (or be parallel to) the edges of the paper.

You may want to turn off **Finepoint Sharpening** for some bitmap images created in paint programs (such as pie charts and graphs with large areas of solid primary colors), in the following cases:

- In images where small areas or narrow bands of color, either very high or very low in intensity (or saturation), disappear or have rounded corners when printed with **Finepoint Sharpening**.
- In images with dramatic shifts in colors, for example, where an area of dark color is next to an area of light color, or where an area of highly saturated color is next to an area of lightly saturated color. With the **Finepoint Sharpening** option checked *on*, you may see some "ghosting" or shading between these different color areas.

Chapter

6 Using Color

TekColor Dynamic Correction

This chapter explains how to select colors and how to make color corrections on your prints. Also included are instructions for printing and using the color sampler charts provided on the diskettes shipped with the printer.

The TekColor color corrections provide simulations of different color devices:

- Simulate Press is a printing press standard for graphic arts use.
- Vivid Color and Simulate Screen are color corrections for business, engineering, and scientific imaging applications.

These color corrections are driver-selectable from Macintosh and Windows applications using the Tektronix printer drivers. Color corrections can also be set from the printer's front panel.

Note *TekColor color corrections do not affect colors specified in the PostScript Level 2 international color standard CIE XYZ developed by the Commission Internationale de l'Eclairage (International Commission on Illumination).*

Working with color

You probably purchased your color printer with some idea of how you wanted to use color in your work. Whether you are producing color overhead transparencies for presentations, color handouts or reports, or design comps, there are a few things to keep in mind when using color. Colors look different depending on the size of the color area, the surrounding colors, and the lighting conditions.

- A large area of color looks more saturated (brighter) than a small area of the same color.
- A color looks brighter against a dark background than it does against a white background.
- Colors look different due to the background color or to the surrounding colors.
- The appearance of a color varies with the type and amount of light, for example fluorescent lighting versus sunlight.

General guidelines

- Keep it simple and consistent.
- Select colors that look good together and that reinforce your message.
- Check your application for standard palettes to get you started.
- Use a color scheme of five or six shades, and in a series of images, use the colors in a consistent manner throughout the series.
- Use color to highlight the most important information, such as a bar or pie segment in a chart or graph.
- Use color to show relationships between objects, such as a range of values. Objects with a similar meaning or value should be in similar colors.
- Use color as graphic elements in the design of newsletters, logos, and brochures.
- Avoid red and green combinations; these colors are hard for people with red/green color blindness to distinguish.

Using color in presentations

When used consistently, color in your presentations will help your audience remember key points. For example, graphics that represent your product should always appear in the same color. If you represent data graphically, be sure to put the most important data in red or the brightest, warmest color in your selected palette. Put the data you do not want to emphasize in cool colors.

General rules for colorful presentations:

- Keep it simple; use up to 7 colors maximum.
- Use color to indicate related elements.
- Use complementary colors for basic color schemes; use split complements for more subtle effects.
- Avoid blue/red and yellow/purple combinations.
- Use highly saturated warm colors sparingly for emphasis.
- Use a cool, dark background color that won't compete with the foreground. Use foreground colors that stand out clearly against the background. Research indicates that blue is the most preferred background color, followed by black, gray, brown, red, green, and purple.

General rules for text in presentations:

- For readability, use dark text on a lighter background, or light text on a darker background. For example, white or yellow text with a deep blue background.
- Make text bold for emphasis.
- Text sizes on overhead transparencies or slides:
  Use a 40-point or larger font for titles.
  Use 24- to 36-point fonts for body text.
  Use 5 to 7 lines of text *maximum* per slide or overhead.

Selecting color corrections

Color printers and computer display screens produce color differently. Printers use the subtractive primaries CMYK (cyan, magenta, yellow, and black), and produce color when light is reflected off the paper. Computers use the additive primaries RGB (red, green, blue) with a light-emitting CRT screen. The printer and the computer screen each have a different range of possible colors they can produce, with some overlap between them.

Software application packages specify color in different ways, for example as CMYK or RGB, or they may give you a choice. Get to know your applications so you can get the most out of them.

The TekColor color correction options are available for a finer degree of control over color. Since no single color correction option can address all uses, refer to the following table for the description that best fits your printing situation, and try the suggested color correction.

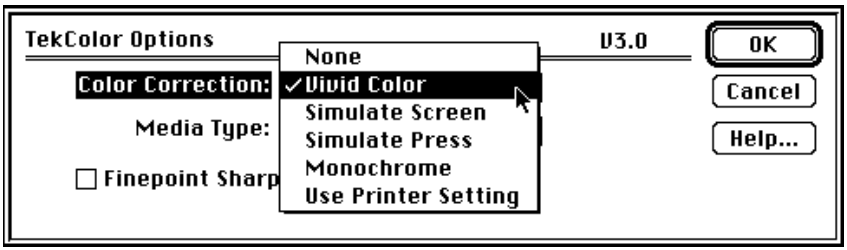
Printing objective or problem	**Color correction to use**	**Where to find details**
Overhead transparency presentations	Vivid Color	page 6-8
Blue colors are printing too purple	Vivid Color	page 6-8
Using PANTONE Colors	None	page 6-7
Colors should match computer display screen	Simulate Screen	page 6-9
Colors should match a printing press	Simulate Press	page 6-10
Colors are too dark	Simulate Screen	page 6-9
Colors are washed out or faded	Vivid Color	page 6-8
Print in gray scale	Monochrome	page 6-11
Use printer's current color defaults	Use Printer Setting	page 6-12

This chapter explains how to set color corrections with the Tektronix printer drivers. Refer to Chapter 2, "Printing From a Macintosh," or Chapter 3, "Printing From a PC," for information on installing Tektronix drivers and opening driver dialog boxes. Refer to the *Phaser 140 Color Printer User Manual* for instructions on making selections from the printer's front panel.

A setting made in the driver overrides the front panel setting for prints made from the driver. However, the driver's **Use Printer Setting** option allows you to use the current front panel selection.

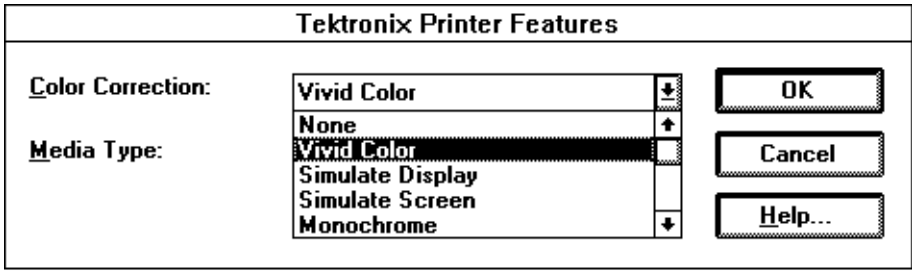
Macintosh driver

The **Color Correction** options are in the **TekColor Options** dialog box.



Windows driver

The **Color Correction** options are in the **Tektronix Printer Feature**s dialog box.



If your Phaser 140 printer is shared by other users on a network

Another user may use the printer's front panel to change the printer's default color correction setting. If this situation occurs, the prints you make through a non-Tektronix driver may not print as expected. Refer to "Sharing the printer on a network" on page 8-16 for details on how the color corrections interact with the driver settings for either Tektronix or non-Tektronix drivers.

Application color corrections

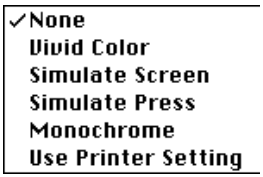
Some applications perform color corrections to improve screen-to-printer color matching. The color correction options in the Tektronix drivers adjust colors in the printer after the application has performed its color corrections. If the application uses CIE (Commission Internationale de l'Eclairage) colors, the Tektronix corrections will not be applied. If you select a color correction option in the driver other than **None**, the selection may override some application features. If you try one of the driver's other options and the printed results are not what you expected, then select the **None** option and try reprinting your image with the new setting.

If you are using a non-Tektronix driver

To use the color corrections with a non-Tektronix driver, refer to the *Phaser 140 Color Printer User Manual* for instructions on using the printer's front panel.

Turning off all color corrections

If you do not want to use any Tektronix color corrections, you can specify no corrections either from a Tektronix driver or with the printer's front panel. Select no corrections when you are using applications that do their own color adjusting.



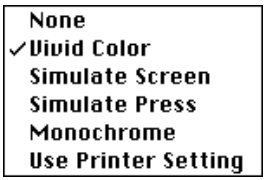
Choose *one* of the following methods to turn off all color corrections:

- **Macintosh driver:** Select the **None** option in the **TekColor Options** dialog box.
- **Windows driver:** Select the **None** option in the **Tektronix Printer Features** dialog box.
- **Printer's front panel:** ADJUST COLOR menu, **no color adjust** option.

Printing a truer blue

The **Vivid Color** option makes printed blue appear less purple by reducing the amount of magenta used to print blue colors. Other colors in the cyan-blue-purple-magenta range in the image are also adjusted to compensate for the adjusted blue. Colors in the red-orange-yellow-green range are not affected. This selection is good for making presentation graphics, such as overhead transparencies, and for bright-looking colors that don't need to match the screen's colors or printing press colors.

This option adjusts CMYK colors using a method that adds black to other components. This option prints more saturated (darker) colors and may be useful for printing overhead transparencies for presentations from some applications, such as CorelDRAW!. Use this option if you have specified a color in the CMYK system, *and* the color has a black component, *and* the color appears lighter than you expected when printed.

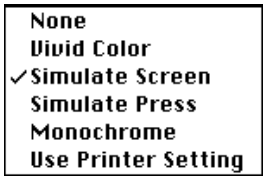


Choose *one* of the following methods to use the Vivid Color color correction.

- **Macintosh driver:** Select the **Vivid Color** option in the **TekColor Options** dialog box.
- **Windows driver:** Select the **Vivid Color** option in the **Tektronix Printer Features** dialog box.
- **Printer's front panel:** ADJUST COLOR menu, **vivid color** option.

Simulating display screen colors

The **Simulate Screen** option makes printed colors approximate the colors on a standard display screen. This selection should improve the screen-to-printer color accuracy for most applications that don't perform their own color corrections. This selection is best for applications that define colors as *RGB* (red, green, blue), *HLS* (hue, lightness, saturation), or *HSB* (hue, saturation, brightness).



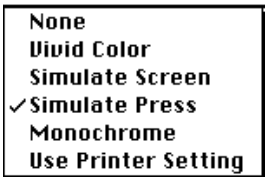
Choose *one* of the following methods to use the Simulate Screen color correction.

- **Macintosh driver:** Select the **Simulate Screen** option in the **TekColor Options** dialog box.
- **Windows driver:** Select the **Simulate Screen** option in the **Tektronix Printer Features** dialog box.
- **Printer's front panel:** ADJUST COLOR menu, **simulate screen** option.

Closely match printing press colors

The **Simulate Press** option simulates a 4-process color commercial printing press, not solid spot colors such as PANTONE Colors. Use this option if you are previewing work for a 4-process color printing press.

Note *If you are selecting PANTONE Colors in your application, use the **None** option; see page 6-7 for details. Also, use the **None** option with other color management systems such as EfiColor.*

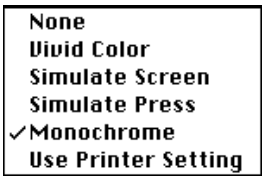


Choose *one* of the following methods to use the **Simulate Press** option:

- **Macintosh driver:** Select the **Simulate Press** option in the **TekColor Options** dialog box.
- **Windows driver:** Select the **Simulate Press** option in the **Tektronix Printer Features** dialog box.
- **Printer's front panel:** ADJUST COLOR menu, **simulate press** option.

Printing in gray scale

The **Monochrome** option prints your color image as a monochrome gray scale (shades of gray between black and white). Use this option to print page masters for photocopying in black-and-white.

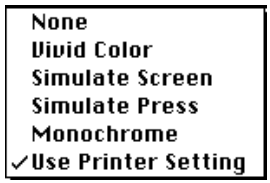


Choose *one* of the following methods to use the **Monochrome** option:

- **Macintosh driver:** Select the **Monochrome** option in the **TekColor Options** dialog box.
- **Windows driver:** Select the **Monochrome** option in the **Tektronix Printer Features** dialog box.
- **Printer's front panel:** ADJUST COLOR menu, **monochrome** option.

Using the printer's current color defaults

The **Use Printer Setting** option is available only in the Tektronix Macintosh and Windows drivers. This option sends no color correction to the printer. **Use Printer Setting** uses the currently selected option in the ADJUST COLOR menu on the printer's front panel to process colors for printing.



Use one of the following methods to use the printer's default color correction:

- **Macintosh driver:** Select the **Use Printer Setting** option in the **TekColor Options** dialog box.
- **Windows driver:** Select the **Use Printer Setting** option in the **Tektronix Printer Features** dialog box.

Printing the color sampler charts

You can select colors within an application using color component values. Which color chart you print and use depends on how the application you are using selects color. Refer to the application's documentation for information on color selection, then print one of the charts listed in the table below.

Color sampler chart files

Color sampler chart	Number of printed pages	Macintosh file name*	PC file name**
Print a sample of CMYK colors	18	CMYK Sampler	CMYK.PS
Print a sample of RGB colors	12	RGB Sampler	RGB.PS
Print a sample of HSB colors	12	HSB Sampler	HSB.PS
Print a sample of Pantone Colors	46	PANTONE-Tek Phaser 140	PANT140.PS

*The Macintosh files are located in the compressed Phaser 140 Samplers.sea archive file on the Macintosh Driver and Printer Utilities diskette; refer to page 2-12 for decompressing instructions.
**The PC files are located in the SAMPLERS directory on the Windows 3.1 Driver and Printer Utilities diskette.

The color sampler charts are made up of areas of color with each color's components listed below it. Each color sampler chart is several pages long; they are printed in panels that can be connected to form a wall chart or placed in a binder for easy reference.

Illustration

Before you print the CMYK, RGB, and HSB color charts

To match colors on the charts to colors selected within an application, use the same color correction to print the charts that you are going to use when selecting and printing those colors within an application. The following table lists the driver color correction settings with their corresponding front panel settings.

For example, if you are going to print from an application with the driver's **Vivid Color** option selected, then print the color chart with the **vivid color** (ADJUST COLOR menu) front panel selection. Or, if you are not using a Tektronix driver, use the same front panel selection to print the chart and to print the colors from an application.

Driver and front panel settings

Tektronix printer driver setting	Printer's front panel selection (ADJUST COLOR menu)
Simulate Screen	simulate screen
Vivid Color	vivid color
Use Printer Setting	(any front panel color setting)*
Simulate Press	simulate press
None	no color adjust

*Make sure you use the same color correction to print the chart and later to print the colors from an application.

Printing the CMYK, RGB, and HSB color charts

Macintosh users

1. Follow the instructions on page 2-12 to decompress the *Phaser 140 Samplers.sea* archive file from the Macintosh Driver and Printer Utilities diskette onto your hard disk.

2. Determine which color correction you need to use by examining the table on page 6-15. Then make the appropriate selection on the printer's front panel.

3. Select the appropriate printer in the **Chooser**.

4. Locate the color sampler chart file you want in the folder on your hard disk containing decompressed files.

   Double-click the color sampler chart's self-sending arrow icon; click **OK** in the dialog box to send the file to the printer.

5. Select colors within an application using the colors on the chart.

6. **If you are printing from a Tektronix driver:** Print your document using the Tektronix printer driver with the same color correction option selected in the driver that you used on the printer's front panel to print the chart. Any other color correction selection in the driver can cause the colors to print differently.

   If you are not using a Tektronix driver: Print your document with the same front panel color correction you used to print the chart.

PC and workstation users

1. Copy the color sampler chart files you want to use from the *SAMPLERS* directory on the Windows 3.1 Driver and Printer Utilities diskette onto your computer's hard disk. You may want to place these files in a Utilities directory. Or, you can print these files directly from the diskette.

2. Determine which color correction you need to use by examining the table on page 6-15. Then make the appropriate selection on the printer's front panel.

3. **PC users**: To print the color sampler charts, use the DOS **COPY** command to send the sampler file to the printer.

   Workstation users: To print the color sampler charts, send the file to the printer as you would any PostScript file.

4. Select colors within an application using the colors on the chart.

5. **If you are printing from a Tektronix driver:** Print your document using the Tektronix printer driver with the same color correction option selected in the driver that you used on the front panel to print the chart. Any other color correction selection in the driver can cause the colors to print differently.

   If you are not using a Tektronix driver: Print your document with the same front panel color correction you used to print the chart.

Printing the PANTONE® Color chart

Note *Do not use any color corrections in a driver or on the front panel when printing the PANTONE color chart or when printing PANTONE Colors from an application.*

The *PANTONE-Tek Phaser 140* (*PANT140.PS*) file prints a PANTONE Color sampler chart (about 46 pages in length). Use the chart to select colors within an application that allows you to specify PANTONE Colors.

Macintosh users

1. Follow the instructions on page 2-12 to decompress the *Phaser 140 Samplers.sea* and the *Phaser 140 Utilities.sea* archive files from the Macintosh Driver and Printer Utilities diskette onto your hard disk.

2. Select the **no color adjust** option in the ADJUST COLOR menu on the printer's front panel.

3. Select the appropriate printer in the **Chooser**.

4. To print the chart, do the following:

   a. Locate the *LaserWriter Utility* in the folder on your hard disk containing decompressed files. Double-click the *LaserWriter Utility* icon to start the application.

   b. Select **Download PostScript File** from the **Utilities** menu.

   c. Select the *PANTONE-Tek Phaser 140* file, and click **Open**.

   d. At the prompt `Save PostScript output as:` you are asked for a file name for saving printer output. Use the default name given in the edit box or type in a new name. Then click **Save** to send the file to the printer.

   e. If no output is returned by the printer, the *LaserWriter Utility* displays a dialog box. Click **OK** in the box to continue.

5. Select PANTONE Colors within an application using the colors on the chart.

6. **If you are printing from a Tektronix driver:** Print your document with the **None** option selected. Any other color correction selection in the driver will cause the PANTONE Colors to print differently.

   If you are not using a Tektronix driver: Print your document with the **no color adjust** option selected in the ADJUST COLOR menu on the printer's front panel.

PC and workstation users

1. Copy the *PANT140.PS* sampler file from *SAMPLERS* directory on the Windows 3.1 Driver and Printer Utilities diskette onto your computer's hard disk. You may want to place this file in a *Utilities* directory. Or, you can print this file directly from the diskette.

2. Select the **no color adjust** option in the ADJUST COLOR menu on the printer's front panel.

3. **PC users**: To print the PANTONE Color chart, use the DOS **COPY** command to send the sampler file to the printer.

   Workstation users: To print the PANTONE Color chart, send the file to the printer as you would any PostScript file.

4. Select PANTONE Colors within an application using the colors on the chart.

5. **If you are printing from a Tektronix driver:** Print your document with the **None** option selected. Any other color correction selection in the driver will cause the PANTONE Colors to print differently.

   If you are not using a Tektronix driver: Print your document with the **no color adjust** option selected in the ADJUST COLOR menu on the printer's front panel.

Chapter

7 Using Fonts

This chapter explains how to use fonts and print a font sampler in the Macintosh and PC environments.

Note *For general information on fonts, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.*

Macintosh fonts

Using Macintosh screen fonts

Note *If you already have these fonts installed on your computer, you don't need to install them again.*

The *Screen Fonts.sea* archive file on the Macintosh Driver and Printer Utilities diskette contains screen fonts in several typeface families. However, only the following fonts are resident in the printer: Courier, Helvetica, Helvetica Narrow, Symbol, and Times.

You need to decompress and install the screen fonts on your computer if you want to see the printer's resident typefaces on the Macintosh screen. If you select a font the printer doesn't have, the Macintosh creates a representative font for printing.

Decompressing the fonts

Note *Do not decompress fonts directly into the **System Folder**; they must be properly installed after they have been decompressed onto your hard disk.*

1. Insert the Macintosh Driver and Printer Utilities diskette into your computer's disk drive.
2. Double-click on the *Phaser ScreenFonts.sea* archive file.
3. At the **Self-Extracting Archive** dialog box, click **Continue**.
4. In the dialog box, select the drive where you want the decompressed fonts saved.
5. At the prompt `Install software as:` you are asked to name the folder where you want the decompressed fonts to reside. Use either the default folder name listed in the edit box or type in the name you want for the folder. Then click **Save**.
6. At the **Installation was successful** dialog box, click **Quit**. The decompressed fonts are saved in the folder you specified.

Installing the decompressed fonts

For System 6.0.7 users: Use the Font/DA Mover (located on your Apple system software diskettes) to install the fonts you want from the **Phaser Screen Fonts** suitcase.

For System 7.0 users: Drag the fonts you want from the **Phaser Screen Fonts** suitcase to the **System Folder**.

Select the printer font you want to use within an application and see the same font on the screen.

Printing a font sampler

You can print a sample of the printer's resident fonts by downloading the *Font Sampler* utility file to the printer.

1. The *Font Sampler* is compressed into the *Phaser 140 Samplers.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use it. Follow the instructions on page 2-12 to decompress this file, then continue with the steps listed below.

2. Select the appropriate printer in the **Chooser**.

3. Locate the *Font Sampler* file in the folder on your hard disk containing decompressed files.

   Double-click the *Font Sampler* self-sending arrow icon.

4. Click **OK** in the dialog box to send the file to the printer.

Downloading fonts to the printer

The fonts resident in your printer are stored as outlines and are always available for printing. The PostScript interpreter in the printer can also accept and store additional fonts known as downloadable fonts. If you want to print PostScript outline fonts that are not built into the printer, you can transfer or download outline fonts from your computer to the printer. Downloading fonts saves print time if you plan to print several documents or a large document using those fonts.

When you download a font, it is stored in the printer's memory. You can download as many outline fonts as the printer's memory allows.

1. The *LaserWriter Utility* is compressed into the *Phaser 140 Utilities.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use it. Follow the instructions on page 2-12 to decompress this file, then continue with the steps listed below.

2. Select the appropriate printer in the **Chooser**.

3. Locate the *LaserWriter Utility* file in the folder on your hard disk containing decompressed utility files. You may want to place this utility in a Utilities folder, or leave the utility on your desktop if you use it often.

4. Double-click on the **LaserWriter Utility** icon.

5. To send fonts to the printer, use the **Download Fonts** command in the **File** menu.

   (To send PostScript files to the printer, refer to "Using the LaserWriter Utility to send files to the printer" on page 2-14.)

6. Select the font then click **Open**. The font is sent to the printer. The font remains available until the printer is reset or switched off.

PC fonts

Using fonts with Windows

Before printing, you need to make sure the fonts specified in your document are installed in the printer. If you request a font in an application that is not resident in the printer, the text is printed in the Courier typeface. Or, to use fonts that are not resident in the printer, do one of the following:

- Using a font downloader supplied with your font package, download the desired font to the printer.
- Edit your *WIN.INI* file so the Tektronix Windows driver automatically downloads the fonts you need as part of a print job. Refer to your Windows documentation for details on this procedure.

  Some font packages automatically update the PostScript port entries in your *WIN.INI* file when you reinstall the fonts. Refer to the font package's documentation for instructions.

Printing a font sampler

You can print a sample of the printer's resident fonts by downloading the *FONTS.PS* utility file to the printer.

1. Locate the *FONTS.PS* file in the *SAMPLERS* directory on the Windows 3.1 Driver and Printer Utilities diskette.
2. Copy the file to your hard disk, or use the file from the diskette.
3. **PC users**: Use the DOS **COPY** command to send the file to the printer, or use the Copy command in the File Manager; see page 3-21 for instructions.

   Workstation users: Send the file to the printer as you would any PostScript file.

Downloading fonts to the printer

The fonts resident in your printer are stored as outlines and are always available for printing. The PostScript interpreter in the printer can also accept and store additional fonts known as downloadable fonts. If you want to print PostScript outline fonts that are not built into the printer, you can transfer or download outline fonts from your computer to the printer. Downloading fonts saves print time if you plan to print several documents or a large document using those fonts.

When you download a font, it is stored in the printer's memory. You can download as many outline fonts as the printer's memory allows.

A font downloader is an interactive program that lets you transfer Adobe fonts and other PostScript files to the printer. Check your font package for a downloader application. Or, check the Tektronix Bulletin Board Service (BBS) for a PC font downloader; refer to page 8-1 for instructions.

Chapter

8 Troubleshooting

Getting help

Using the Tektronix Bulletin Board Service

The Tektronix Bulletin Board Service (BBS) is available for direct downloading of the latest versions of printer drivers, utilities, and files. If you have a Macintosh or PC, communication software, and modem, you can call the system and use the menus to locate and download the files you want.

To access the BBS 24 hours a day, 7 days a week, call (503) 685-4504.

For a detailed instruction guide on system requirements, terminal settings, protocol, modem, how to connect to our BBS, and how to download files, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.

Reaching the Customer Support staff

If your problem is still not resolved after trying the suggestions in this chapter, call the Tektronix Customer Support Hotline in the United States from 6 AM to 5 PM PST at 1-800-835-6100. Outside the U.S., contact your reseller or local Tektronix office.

Also, refer to the HAL catalog for articles on using the printer, specific applications, and computing environments; see page 8-2 for instructions on using HAL and EuroHAL.

Using the automated fax systems

As an alternative to using the Customer Support Hotline, and to provide up-to-date information quickly, Tektronix has set up HAL and EuroHAL, two interactive, automated fax systems. These automated fax systems provide Macintosh, PC, and workstation users with the latest technical hints and tips (like color matching), solutions to common technical problems, and application notes (like CorelDRAW! and QuarkXPress).

You may call HAL from anywhere in the world. The fax systems are available 24 hours a day, seven days a week. If you have a fax machine and a touch-tone voice telephone, you can order a HAL catalog listing all of the information offered by HAL. Call **(503) 682-7450** (direct) or, in the U.S. and Canada, call **1-800-835-6100** (at the prompt, choose the option for technical documentation via fax).

Use HAL to order a catalog or individual documents in the U.S.A. and Canada

Note *Before ordering documents from HAL, order a catalog listing the numbers of available documents. You may want to replace your catalog periodically, since the system is often updated.*

1. Before you call, write down the area code and telephone number for your fax machine. HAL will ask you to key this number through the keypad on your voice telephone. If you are calling from outside the United States or Canada, you'll need to know the international access code to reach your country from the United States. Without a complete fax number, HAL cannot call your fax machine.
2. Call only from a touch-tone voice telephone.
3. Follow through the voice-prompted (English) menu.
4. Order individual documents by entering the desired document's number as listed in the HAL catalog. Enter the number by using your telephone's keypad.
5. You can order up to three documents per call.
6. The HAL catalog or documents you request are faxed to you in a matter of minutes.

Use EuroHAL to order a catalog or individual documents in Europe

EuroHAL includes many documents, some in English and some in other European languages. If a local version of the document you want is available, EuroHAL will send it in your language. Otherwise, it will send English documents.

If you have a tone-dial telephone and a fax machine, then you can use EuroHAL. If your telephone has star (*) and hash mark (#) keys then it can probably use tones; ask your local telephone supplier if you are not sure.

If your telephone does not have these keys or has a dial, you will need to buy a *tone dialer* from your local telephone or electronics shop. This small box is held to the phone and will send the standard tones that you need to talk to EuroHAL.

1. To use EuroHAL, dial one of the numbers listed in the following table.

Country	Number
Austria	00 44 628 478 347
Belgium	00 44 628 478 347
Denmark	0 09 44 628 478 347
Finland	990 44 628 478 347
France	05 90 81 86
Germany	0130 819 220
Holland	09 44 628 478 347
Italy	00 44 628 478 347
Norway	0 95 44 628 478 347
Spain	07 44 628 478 347
Sweden	0 09 44 628 478 347
Switzerland	00 44 628 478 347
UK	0628 478 347
Other countries	+44 628 478 347 (where + is your country's International Access Code)

2. EuroHAL answers and asks which language you want to use.

   For English Press **1**
   For French Press **2**
   For German Press **3**

3. The first time you use EuroHAL, you should order a catalog. This lists all the documents that are available, and is constantly updated.

4. EuroHAL asks you for your fax machine number. If you are calling from outside the UK, add your country code first, as shown in the following table.

Country	Country code	Your area code and fax number	Press # when finished
Austria	010 43	area code fax number	#
Belgium	010 32	area code fax number	#
Denmark	010 45	area code fax number	#
Finland	010 358	area code fax number	#
France	010 33	area code fax number	#
Germany	010 49	area code fax number	#
Holland	010 31	area code fax number	#
Italy	010 39	area code fax number	#
Norway	010 47	area code fax number	#
Spain	010 34	area code fax number	#
Sweden	010 46	area code fax number	#
Switzerland	010 41	area code fax number	#
UK		just enter your fax number	#
Other countries	010 xx	area code number	#

Using the INTERNET to download Tektronix files

If you don't have the means of transferring files from the Windows 3.1 Driver and Printer Utilities diskette for PC/DOS, you can request files from the Tektronix Color Printer Information Server, an automatic file serving program that responds to requests for files.

If you can exchange electronic mail with other Internet sites, you can access the Tektronix Color Printer Information Server. From this server you can retrieve driver and utility files and color printer information.

In the following mail requests, substitute the library of your choice for ***library-name***, and the file of your choice for ***filename***.

Send your requests for files to the following electronic mail address:

```
color_printer_info@TEKTRONIX.TEK.COM
```

To receive the list of information available on the server, type the following at the **Subject** prompt:

```
send index
```

To examine the full index for any library, type this command:

```
send index from library-name
```

To request a single file from a directory, type this command:

```
send filename from library-name
```

To determine file size, type this command:

```
send list of filename from library-name
```

Opening the READ ME files on the Macintosh diskette

The Tektronix Macintosh diskette contains a *READ ME* file providing information that arrived too late to be included in this manual. This *READ ME* file was written in the *TeachText* program. You must have a copy of *TeachText* installed on your hard disk to read this file. If you don't have a copy already installed, copy *TeachText* from the same Apple system software diskettes you last used to upgrade your computer.

Solving PostScript printing problems

PostScript printing errors

If you get a PostScript error when printing from Aldus PageMaker, Aldus FreeHand, QuarkXPress, or Canvas, you may be using an older or incorrect version of the printer description file. Refer to "Printing from an application" on page 2-17 (Macintosh) or page 3-26 (PC) for instructions on using printer description files.

When using printer description files, it is important to match the application's version number to the printer's firmware version number. You can check the printer's firmware version number by printing a copy of the printer's startup page. Refer to the *Phaser 140 Color Printer User Manual* for instructions on using the front panel to print the startup page. If you have upgraded your printer's firmware version, you may need a newer printer description file.

For the most current printer description files, check the Tektronix Bulletin Board Service (BBS). Refer to page 8-1 for instructions on using the Tektronix BBS.

The following table lists a few Macintosh applications and the possible PostScript errors. For information on PC and other applications, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.

Application	Error or problem	Solution
QuarkXPress 3.11 QuarkXPress 3.2	Offending Command: cblnd	You are probably using an older PDF file. Check the BBS for the most current version of this file.
QuarkXPress 3.1x	Graduated fills print in black and white	You are probably using an older PDF file. Check the BBS for the most current version of this file.
FreeHand 3.1	error:typecheck offending command: put	A PostScript fill is being used with a color correction from the printer driver. Turn off any color correction in the driver and the image should print correctly.
FreeHand 3.1	TIFFs print in black and white	You are probably using the wrong PDX file. Check the BBS for the most current version of this file.

Random PostScript errors

If you are using AppleTalk Network Software below version 58.x, you may experience a problem with random PostScript errors when printing to a Phaser 140 color printer. If this is the case, you should upgrade the AppleTalk Network Software on your Macintosh computer.

The printing problem is due to a timing conflict between the older AppleTalk software and the printer. The PostScript errors can be any type of error or offending command, and may occur in any of the following situations:

- May occur more often over LocalTalk than EtherTalk.
- Sending the same file more than once may cause different errors or offending commands each time, or the file may print without an error.
- Files from some applications may print, while files from other applications may not.
- Documents saved to PostScript files and sent to the printer with a downloading utility may generate errors.

To upgrade your software

1. Insert the AppleTalk Installer for the Macintosh diskette into your computer's disk drive.
2. Double-click on the **Installer** icon.
3. Click **OK** in the introduction screen.
4. Click **Install** in the **Easy Install** window to install the recommended software. (Or, click **Customize** to select individual items.)
5. After successful installation, click **Restart** to restart your computer.

Using a PostScript error handler

The error handling utility is useful for diagnosing problems when a job doesn't print. This utility installs a PostScript error-handling function in the printer to help determine the cause of some PostScript printing problems. PostScript errors are printed on a page with other status information when an error occurs. This utility can be useful to programmers for debugging PostScript code. The error handler is also available through the printer's front panel; refer to the *Phaser 140 Color Printer User Manual* for instructions.

To turn on the error handler, follow the instructions below. To turn off the error handler, follow the instructions on page 8-17 to reset the printer.

Macintosh users

1. The *Tek Error Handler* file is compressed into the *Phaser 140 Utilities.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use it. Follow the instructions on page 2-12 to decompress this file, then continue with the steps listed below.
2. Select the appropriate printer in the **Chooser**.
3. Locate the *Tek Error Handler* file in the folder on your hard disk containing decompressed utility files.
4. Double-click the file's self-sending arrow icon. Click **OK** in the dialog box to send the file to the printer.

PC and workstation users

1. Locate the *TEKEHAND.PS* file in the *PHSR140* directory on the Windows 3.1 Driver and Printer Utilities diskette.
2. Copy the file to your hard disk, or use it from the diskette.
3. **PC users**: Use the DOS **COPY** command to send the file to the printer. To send the file to the parallel port, type the following at the DOS prompt:

   ```
   COPY TEKEHAND.PS LPT1:
   ```

   Workstation users: Send the file to the printer as you would any PostScript file.

Improving print speed

Note *There are different ways to improve print speed, such as by upgrading to EtherTalk on a Macintosh, to Novell on a PC, or to TCP/IP on a workstation. For more information, request a document catalog from HAL or EuroHAL, the Tektronix automated fax systems. Refer to page 8-2 for instructions on using these systems.*

If you tried to print a document with bitmapped images to a PostScript Level 2 printer, but are dissatisfied with the speed of the output, here are some suggestions:

Macintosh and Windows users:

- When you use any color correction option (other than **None**), your printer can take longer to process bitmapped images.
- The **Plain (standard)** option prints faster than the **Plain (premium)** option. Select these modes from the Tektronix drivers and from the printer's front panel.

Windows users:

- Turn off the Print Manager; printing via the Print Manager is slower, but turning it off ties up the PC longer.
- Select the Tektronix Phaser 140 printer in the **Printers** dialog box.
- Make sure the **Use PostScript Level 2 Features** check box in the **Advanced Options** dialog box is turned on.
- From your application, choose the **Tektronix Phaser 140** as your printer.
- Try printing the document again.

If your file doesn't print

If you've configured the Tektronix driver for your printer but your printer isn't printing, try the following suggestions. If these suggestions fail to solve the problem, copy the Tektronix PostScript Level 2 error handler utility to your printer to determine what is wrong. Refer to page 8-8 for information on using the error handler.

General things to check for

Macintosh users:

- Open the **Chooser** and select the **Tektronix Phaser 140** driver and the printer you want to use.
- If you are having trouble printing from the Finder in System 7.1, for example if the Phaser 140 driver dialog boxes are not opening, it may be because the Finder doesn't have enough allocated memory. Reinstall the Tektronix driver to automatically allocate enough memory for printing from the Finder.

Windows users:

- Make sure your printer is connected to the port you selected in the **Printers/Connect** dialog box.
- Try resetting the **Transmission Retry** timeout option in the **Printers/Connect** dialog box to **850** seconds.
- Check the **Options** dialog box to make sure **Printer**, not **Encapsulated PostScript File**, is selected in the **Print To** box.
- The following error message appears on your computer screen: *Windows Header has not been downloaded to the printer.* Open the **Options** dialog box and turn on the **Send Header with Each Job** check box. Refer to page 3-10 for details.

If you are using PC/NFS

If you have PC/NFS software installed on your computer, you need to make the following selection in the **Network Options** dialog box:

1. From the **Main** window, double-click the **Print Manager** icon.
2. From the **Options** menu in the **Print Manager**, select **Network Settings**.
3. In the **Network Options** dialog box, uncheck the **Print Net Jobs Direct** box.
4. Choose the **OK** button.

Fixing timeout problems in Windows

Try one of the following procedures to correct Windows timeout problems. If the Windows procedure doesn't work for you, then try the DOS procedure.

From Windows

1. Select **Control Panel** from the **Main** menu.
2. Select **Printers**.
3. Select **Connect**.
4. Increase the **Transmission Retry** to **850** seconds.

From DOS

Note *To use this procedure, the printer must be connected directly to your computer, not on a network.*

1. At the DOS prompt, issue the DOS **MODE** command by typing the following:

   ```
   MODE LPT1:,,P
   ```

2. Start Windows.
1. Select **Control Panel** from the **Main** menu.
2. Select **Printers**.
3. Select **Connect**.
4. Change the port selection from **LPT1** to either **LPT1.DOS** or **LPT1.OS2** depending on the options you see in the dialog box.

Correcting printing problems

Printed colors are not what you expected

- Select another **Color Correction** option in the driver and print your image again. Refer to Chapter 6, "Using Color," for more information.

- If you are not using a Tektronix driver and are sharing the printer with other users on a network, another user may have changed the printer's color adjustment setting. Refer to page 8-16 for more information.

- If you use the driver's **Use Printer's Settings** option and printed colors are not what you expected, check the selection in the ADJUST COLOR menu on the printer's front panel. These settings change the printer's default color correction. Refer to page 8-16 for details on how these settings affect prints made from the driver.

- If PANTONE Colors are not printing as expected, make sure you are printing without any color corrections as outlined below. Also, refer to "Printing the PANTONE Color chart" for more information.

  From the Tektronix Macintosh driver, select the **None** option in the **TekColor Options** dialog box

  From the Tektronix Windows driver, select the **None** option in the **Tektronix Printer Features** dialog box.

  If you are not using a Tektronix driver, select no color adjust in the ADJUST COLOR menu on the printer's front panel.

  If you have questions about PANTONE Color Matching, refer to the HAL article on PANTONE. Refer to page 8-2 for instructions on using HAL and EuroHAL.

Use Tektronix halftone screens

Tektronix halftone screens are designed for Tektronix printers, and improve print quality over application-set halftone screens. The *Setscreen Patch* utility file redefines the *setscreen*, *setcolorscreen* and *sethalftone* PostScript operators. When downloaded to the printer, this file prevents applications from overriding the Tektronix proprietary halftone screens.

Macintosh file name	PC file name
Setscreen Patch	SETSCRN.PS

Macintosh users

1. The *Setscreen Patch* file is compressed into the *Phaser 140 Utilities.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use it. Follow the instructions on page 2-12 to decompress this file, then continue with the steps listed below.

2. Select the appropriate printer in the **Chooser**.

3. Locate the *Setscreen Patch* file in the folder on your hard disk containing decompressed utility files.

4. Double-click the *Setscreen Patch* self-sending arrow icon, then click **OK** in the dialog box to send the file to the printer.

PC and workstation users

PC users: Use the DOS **COPY** command to send the file to the printer.

Workstation users: Send the file to the printer as you would any PostScript file.

Small lines disappear, colors shifting

You may want to turn off **Finepoint Sharpening** for some bitmap images created in paint programs (such as pie charts and graphs with large areas of solid primary colors), in the following cases:

- In images where small areas or narrow bands of color, with either very high or very low in intensity (or saturation), disappear or have rounded corners when printed with **Finepoint Sharpening**.
- In images with dramatic shifts in colors, for example, where an area of dark color is next to an area of light color, or where an area of highly saturated color is next to an area of lightly saturated color. With the **Finepoint Sharpening** option checked *on*, you may see some "ghosting" or shading between these different color areas.

Blue colors look too purple

Try printing with the **Vivid Color** color correction.

- **Macintosh driver:** Select the **Vivid Color** option in the **TekColor Options** dialog box.
- **Windows driver:** Select the **Vivid Color** option in the **Tektronix Printer Features** dialog box.
- **Printer's front panel:** ADJUST COLOR menu, **vivid color** option.

Sharing the printer on a network

Driver and front panel interactions

If your Phaser 140 printer is shared by other users on a network, using the printer's front panel to change the printer's default color correction setting can affect prints made by other users.

- All Tektronix driver selections, except **Use Printer Setting**, override the printer's front panel for prints made from the driver.
- The Tektronix driver's **Use Printer Setting** option uses the selection on the printer's front panel ADJUST COLOR menu.

LaserWriter Utility does not work

The *LaserWriter Utility* cannot be used if the printer is connected to a print server. See your system administrator to temporarily remove the printer from the print server to download the *PANTONE-Tek Phaser 140* file, the *Reset Printer* file, and to change the printer's LocalTalk/EtherTalk name.

Programs crashing on a network (Macintosh)

On Macintosh computers with a 68040 microprocessor (Quadra, Centris, and Performa 470 series), some programs may quit unexpectedly, or freeze the computer, when you try to open them over a network. To fix this problem, install the **Network Launch Fix** from the AppleTalk Installer for the Macintosh diskette.

1. Insert the AppleTalk Installer for the Macintosh diskette into your computer's disk drive.
2. Drag the **Network Launch Fix** icon from the diskette to the **Extensions** folder, inside the **System Folder**, on your computer's hard disk.
3. **Restart** your computer.

Resetting the printer

The *Reset Printer* (*RESET.PS*) file resets the printer to its power-on conditions (*not* its factory default conditions), without turning the printer's power switch off and on. The power-on conditions include any custom changes made to the printer that are stored in the printer's NVRAM, or changes that are persistent across printer power cycles. For example, if you used a downloadable utility file to change the printer's name, this is a power-on condition that is not altered by resetting the printer. Resetting the printer erases changes that are not persistent across printer power cycles, such as the Tektronix error handler utility.

This file restarts the printer as soon as all the jobs in its queue are finished. The printer remains unavailable while it initializes.

Macintosh file name	PC file name
Reset Printer and LaserWriter Utility	RESET.PS

Macintosh users

Note *Do not use the* ***Restart Printer*** *command in the LaserWriter Utility's* ***Utilities*** *menu. Follow this procedure to reset the printer using the LaserWriter Utility to download the Reset Printer utility file.*

1. The *LaserWriter Utility* and the *Reset Printer* file are compressed into the *Phaser 140 Utilities.sea* archive file on the Macintosh Driver and Printer Utilities diskette, and must be decompressed before you can use them. Follow the instructions on page 2-12 to decompress these files, then continue with the steps listed below.

2. Locate the *LaserWriter Utility* in the folder on your hard disk containing decompressed utility files. You may want to place this utility in a *Utilities* folder, or leave the utility on your desktop if you use it often.

3. Select the appropriate printer in the **Chooser**.

4. Double-click the *LaserWriter Utility* icon to start the application.

5. Choose **Download PostScript File** from the **Utilities** menu.

6. Select the *Reset Printer* file in the list then click **Open**.

7. At the prompt `Save PostScript output as:` you are asked for a file name for saving printer output. Use either the default name given in the edit box or type in a new name. Click **Save** to send the file to the printer.

Note *The process of resetting the printer takes a few minutes to complete. You will receive a message on your screen indicating the connection has been interrupted during the reset. The connection is re-established after the reset, so you can ignore this message; click the* ***Continue*** *button.*

8. If no output is returned by the printer, the *LaserWriter Utility* displays a dialog box. Click **OK** in the box to continue.

PC and workstation users

1. Locate the *RESET.PS* file in the *PHSR140* directory on the Windows 3.1 Driver and Printer Utilities diskette.

2. Copy the file to your hard disk, or use the file from the diskette.

3. **PC users**: Use the DOS **COPY** command to send the file to the printer.

   To send the file to the parallel port, type:

   ```
   COPY filename LPT1:
   ```

   Workstation users: Send the file to the printer as you would any PostScript file.

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