# **Contents**

```
Contents 1
    Tektronix supplies and accessories 9
    The front panel 14
        Kev 15
        Printing a Menu Map 15
    Print quality modes 16
    TekColor<sup>™</sup> color corrections 17
    Paper tips 18
        Supported page sizes and print area 19
    Manual-feed printing 21
        Supported media 21
        Using the manual-feed slot for single-sided
        printing 22
        Manual-feed speciality media overview 24
    Printing on envelopes 26
        Guidelines for envelope printing 27
        Printing envelopes from a Macintosh 27
        Printing envelopes from Windows 30
    Loading the Standard Paper/ Transparency Tray 31
        Supported media 31
        Loading the tray 32
    Loading the High-Capacity Paper Tray Assembly 33
        Supported media 33
        Loading the tray 33
    Loading the optional High-Capacity
    Transparency/Label Tray 35
        Supported media 35
        Loading the tray 36
    Printing on High Resolution Photo Paper 37
    Printing on labels 38
         39
```

Guidelines for printing on labels 39

Automatic two-sided printing 40

Binding preference 41

Loading letterhead paper for two-sided printing 42

Adding ink 44

Emptying the waste tray 46

Replacing the Maintenance Kit 48

Removing paper jams 50

Media Jam — Open Exit Cover to Clear 50

Media Jam — Open front cover to clear 53

Media Jam — Retry manual feed

54

Media Jam — Remove media (or upper) tray

to clear 55

Media Jam — Remove middle tray to clear 56

Media Jam — Remove lower tray to clear 56

Troubleshooting print quality 57

Light stripes or missing colors 57

Oil or ink smears 59

Ink streaks 60

Ink smears 62

Moving the printer 63

All moves 63

Preparing the printer for shipment 64

Getting help 65

Printer CD-ROM 65

Windows driver help system 65

Color Connection 66

Printer's front panel 66

Internal printer pages 66

PhaserLink<sup>TM</sup> Software 67

Tektronix web site 67

TekSMART $^{\text{\tiny TM}}$  Knowledge Base 67

Other online services 68

### **Customer Support Centers 68**

Printer Management 69
PhaserLink Printer Management software 69
Job Accounting 69
TekSMART™ Knowledge Base 69
Usage Profile 70

### Fonts 71

Resident typefaces (PostScript) 71
Resident typefaces (PCL5C) 71
Downloading fonts 72
Downloading fonts from a Macintosh 73
Printing a list of resident fonts 74
From a Macintosh 74
From a PC or workstation 74

### **Image Smoothing 75**

Quick Collate 76 Requirements 76

### Separation Pages 77

### **PANTONE Colors 78**

Methods of printing PANTONE Colors 78
PANTONE Colors from color selection books 78
Printer-specific PANTONE Colors 78
Installing the PANTONE Color files 79
From the Web 79
Printing the PANTONE Color Chart 80
Macintosh 80
PC 81

### PhaserPrint Plug-in for Photoshop 82

Installing the plug-in: Macintosh 82 Installing the plug-in: Windows 83

Using the plug-in 84

Selecting options in the PhaserPrint dialog box 85

Number of copies 85

Print using (Macintosh) 85

Print using (Windows) 86

Printer model 86

Media size (selection) 86

Color Correction 86

Media 87

Quality 87

Rendering Intent 87

Compress Image Data 87

Fast preview 87

1st Page Preview 88

Image Smoothing 88

Stylized representation of the page 88

Scaling an image 89

Landscape orientation 89

Center images 89

Replicate images 89

Image size 89

Image separation 90

Number of images 90

Image layout 90

Media size (display) 90

Show color preview of image 90

### Printer Utilities 91

Locating the files on the printer's CD-ROM 92

Installing the utility files for Macintosh 92

Installing the files for PC 92

Locating files on the Tektronix World Wide Web site 93

Locating files on the Tektronix FTP server

Downloading files to the printer from a Macintosh 95

Using the Apple Printer Utility to download files 95

Using the Apple Printer Utility to perform other tasks 96

Downloading files to the printer from a PC 97

Downloading files from Windows 3.1 97

Downloading files from Windows 95 / Windows 98 97

Downloading files from Windows NT 97

Downloading files if your printer is connected to a

Novell Netware network 98

Downloading files if your printer is connected

through PhaserPort 99

Downloading files if your printer is connected to

Windows NT 99

Advanced Printing Features for Phaser 850 Printers 100

Previewing with 1st Page Preview 100

Requirements 100

Use 1st Page Preview 100

Reset the timeout 101

Automatic tray switching 102

Front Panel Intensity 102

Intelligent Ready mode 102

Color Sampler Charts for Phaser 850 Printers 103

Overview 103

Color charts 104

Printing a color sampler chart from the Phaser 850 printer's front panel 105

Printing the desired colors from an application 105

Printing the color sampler charts with utility files 106

From a Macintosh 106

94

### From a PC or workstation 106

Troubleshooting Phaser 850 Printers 107 Useful tools 107 Printer CD-ROM 107 Windows driver help system 107 Color Connection 107 Printer's front panel 107 Internal printer pages PhaserLink<sup>TM</sup> Software 108 Tektronix web site 108 TekSMART<sup>TM</sup> Knowledge Base 108 Other online services 108 Front panel messages 109 Problems with automatic two-sided printing 113 Problems printing on labels 114 Labels are printed on the wrong side Printing labels from Microsoft Word 114 **Print Quality Problems** 115 Printing problems 117 Preventing media jams 118 Turning the Startup Page on or off 119 From the printer's front panel 119 From PhaserLink Printer Management software 119 From utility files 119 Protected mode for the front panel menu 120 Turning Sys/Start Job execution on or off 121 Using the front panel 121 Using utility files 121 Cleaning Phaser 850 Printers 122 Selecting the source for cleaning pages 122 Cleaning supplies 122

Light stripes on prints 123

Cleaning for oily streaks 126

Cleaning for ink smears: internal paper path 127

Cleaning for ink smears: paper-feed rollers 129

Cleaning for ink smears: paper-exit path 133

Cleaning for media tray jams 136

Cleaning the media-pick roller 136

Cleaning the separator pad 138

Cleaning for lower tray jams: paper-feed rollers 139

Regulatory Information for Phaser 850 Printers 141

Canadian EMC (Electromagnetic Compatibility)

regulatory standards 141

Declaration of conformity 142

FCC Class B device 143

Phaser 850 Printer Material Safety Data Sheets 144

MSDS for Silicone Oil 145

MSDS for Ink Sticks 147

MSDS for CleanTex® Alcopad 149

151

Specifications for Phaser 850 Printers 152

Index 155

# Tektronix supplies and accessories

To order supplies and accessories, contact your local dealer or visit the Tektronix web site:

### www.tek.com/Color\_Printers/products/supplies.html

### ColorStix Ink

Item	Part Number
3 Free Black sticks	016-1831-00
5 Cyan sticks plus 2 Free Black sticks	016-1825-00
5 Magenta sticks plus 2 Free Black sticks	016-1826-00
5 Yellow sticks plus 2 Free Black sticks	016-1827-00
2 Cyan sticks plus 1 Free Black stick	016-1828-00
2 Magenta sticks plus 1 Free Black stick	016-1829-00
2 Yellow sticks plus 1 Free Black stick	016-1830-00

### **Tektronix Paper**

Item	Size	Description	Part Number
Premium Color	A/Letter (U. S.)	500 sheets	016-1368-00
Printing Paper	8.5 x 11 in.	24-lb. bond, 90 g/m <sup>2</sup>	
Premium Color	A4 (Metric)	500 sheets	016-1369-00
Printing Paper	210 x 297 mm	24-lb. bond, 90 g/m <sup>2</sup>	
High Resolution	A/Letter (U. S.)	25 sheets	016-1808-00
Photo Paper	8.5 x 11 in.	170 g/m <sup>2</sup>	
High Resolution	A4 (Metric)	25 sheets	016-1809-00
Photo Paper	210 x 297 mm	170 g/m <sup>2</sup>	
Premium Cover	A/Letter (U. S.) 8.5 x 11 in.	100 sheets 60-lb. cover, 160 g/m <sup>2</sup>	016-1823-00
Premium Cover	A4 (Metric) 210 x 297 mm	100 sheets 60-lb. cover, $160 \text{ g/m}^2$	016-1824-00

### Transparencies

Item	Size	Description	Part Number
Premium	A/Letter (U. S.) 8.5 x 11 in.	50 sheets	016-1724-00
Premium	A4 (Metric Letter) 210 x 297 mm	50 sheets	016-1725-00
Standard	A/Letter (U. S.) 8.5 x 11 in.	50 sheets	016-1720-00
Standard	A4 (Metric Letter) 210 x 297 mm	50 sheets	016-1721-00

# **Color Printing Labels**

Size	Description	Part Number
A/Letter (U. S.) 8.5 x 11 in.	100 sheets / 30 labels per sheet (each 1 x 2-5/8 in.)	016-1812-00
A/Letter (U. S.) 8.5 x 11 in.	100 sheets / 6 labels per sheet (each 3-1/3 x 4 in.)	016-1813-00
A4 (Metric Letter) 210 x 297 mm	100 sheets / 14 labels per sheet (each 38.1 x 99.1 mm)	016-1814-00
A4 (Metric Letter) 210 x 297 mm	100 sheets / 8 labels per sheet (each 67.1 x 99.1 mm)	016-1815-00

### Maintenance Kit

Item	Part Number
Extended replacement maintenance roller and counter (Life: up to 45,000 images or two years, which ever comes first.)	016-1834-00
Standard replacement maintenance roller and counter (Life: up to 10,000 images or two years, which ever comes first.)	016-1822-00

### Replacement items

Item	Part Number
Maintenance Waste Tray (replacement)	436-0370-01
Maintenance Drawer (replacement)	436-0383-00
Rapid Release Guide	650-4153-00

### Additional memory

Features	Part Numbers
■ Improved performance	■ 64 Mbytes: ZMB64
■ Up to 256 Mbytes maximum	■ 128 Mbytes: ZMB128
The printer has two memory slots.	When adding memory, you can use

The printer has two memory slots. When adding memory, you can use 64-Mbyte and 128-Mbyte DIMMs in combination.

### Trays

Size	Description	Part Number
Standard Paper/Transparency Tray	A/Letter (U. S.)	436-0330-00
Standard Paper/Transparency Tray	A4 (Metric Letter)	436-0332-00
High-Capacity Transparency/ Label Tray	A/Letter (U. S.)	436-0336-00
High-Capacity Transparency/Label Tray	A4 (Metric Letter)	436-0338-00

### **Cleaning Kit**

Item	Part Number
Package of 5 alcohol wipes	016-1845-00

### High-Capacity Paper Tray Assembly

Features	Part Numbers
<ul> <li>Increased paper-printing capacity</li> </ul>	■ U. S.: Z840LTA
<ul> <li>Increased printing versatility and convenience</li> </ul>	■ Metric: Z840LTA Option 01
<ul> <li>Up to two High-Capacity Paper Tray Assemblies can be used</li> </ul>	

### **Printer Station**

Features	Part Number
■ Ergonomic surface height	ZCARTA
<ul> <li>Provides storage for supplies</li> </ul>	

### Internal IDE Hard Drive

Features	Part Number
■ Required for collation	Z850HD
■ Extends font capacity	

### **DP Feature Set**

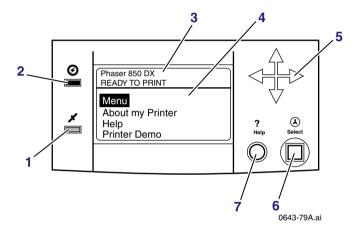
Features	Part Number
■ High Resolution / Photo print-quality mode, 1200 x 600 dpi	Z850FP
<ul> <li>Automatic two-sided printing capability</li> </ul>	
<ul> <li>Adds 32 Mbytes of memory (64 Mbytes total)</li> </ul>	
<ul> <li>1st Page Preview functionality</li> </ul>	
<ul> <li>Quick Collate functionality (requires a hard drive)</li> </ul>	
<ul><li>Page Pipelining</li></ul>	

### PhaserShare® Network Card

Features	Part Number
■ Easy to install	Token Ring: ZNBTR
<ul> <li>Increases shareability</li> </ul>	
■ High-performance network connectivity	

# The front panel

- Provides access to printer settings (tray, print-quality mode, network settings, etc.).
- Displays the printer's operating status (Ready to Print, Printing).
- Alerts you to replace consumables, load paper, and clear jams.



- 1. Error indicator
- 2. Power indicator
- 3. Printer model and current status
- 4. Display
  - Menu: Accesses printer setup menus
  - About My Printer: Displays current printer settings and information
  - **Help:** Accesses information and tools for solving printer problems
  - **Printer Demo:** Prints sample images and color charts
- **5.** Navigation arrows. Use the arrows to scroll the front panel menus.
- **6. Select** button. Selects highlighted settings.
- **7. Help** button. Press at any time for additional information on displayed menu options or status messages.

Printing a Menu Map

The **Menu Map** shows you where features such as the help pages, are located in the front panel's menu structure.

- 1. Scroll to Menu, press Select.
- 2. Scroll to Print Menu Map, press Select.

Front Pane

# Features

# Print quality modes

Print quality modes selectable from a printer driver or the front panel	Maximum speed *
Fast Color	14 ppm Paper
■ Fastest full-color output.	6.5 ppm Transparency
<ul> <li>Useful for many images and previewing work.</li> </ul>	
■ Produces good peer-level documents.	
<ul> <li>Useful for rush jobs when saturated colors are not necessary.</li> </ul>	
Standard	8 ppm Paper
<ul> <li>General-purpose mode for full-color printing.</li> </ul>	3.5 ppm Transparency
<ul> <li>Best quality mode for printing transparencies.</li> </ul>	
<ul> <li>Suitable for most office uses.</li> </ul>	
<ul> <li>Produces vibrant, saturated prints with smooth color transitions.</li> </ul>	
Enhanced **	4 ppm Paper
<ul> <li>Superior text resolution and very smooth light colors.</li> </ul>	
<ul> <li>Balance of high quality and fast speed.</li> </ul>	
<ul> <li>Smoothest and brightest large-area fills.</li> </ul>	
<ul> <li>Useful for printing paper copies of overhead presentations.</li> </ul>	
High Resolution/Photo**	2 ppm Paper
<ul><li>Highest-quality color prints.</li></ul>	
<ul> <li>Near-photographic detail.</li> </ul>	
■ 1200 x 600 dpi.	
<ul><li>Requires DP or DX Feature Set.</li></ul>	

<sup>\*</sup>Approximate number of pages per minute; does not include image processing time. Based on prints with margins of .5 in. or greater.

<sup>\*\*</sup>Transparencies are printed in Standard mode.

# **TekColor**<sup>™</sup> **color corrections**

Color corrections selectable from a printer driver or the front panel	Description	
Automatic	<ul> <li>Automatically applies the best color correction mode to each element on the page</li> </ul>	
None	<ul> <li>No color correction made to colors</li> </ul>	
	<ul> <li>Used with the PANTONE® Color Chart for PANTONE® Color matching</li> </ul>	
Vivid Color	<ul> <li>Produces the brightest possible colors and makes blues appear less purple</li> </ul>	
sRGB Display	<ul> <li>Closely approximates the colors on a standard display screen</li> </ul>	
SWOP Press	<ul> <li>Specification for Web Offset Publications. Used to match U. S. press standards</li> </ul>	
Euroscale Press	<ul> <li>Used to match equivalent Imation Matchprint® proofs</li> </ul>	
Commercial Press	<ul> <li>Used to match commercial Imation Matchprint® proofs</li> </ul>	
SNAP Press	■ Specifications for Non-Heat Advertising Printing	
	<ul> <li>Used to match standards for printing on uncoated and newsprint papers</li> </ul>	
DIC	<ul> <li>Used to match Dai Nippon printing inks on coated paper</li> </ul>	
Toyo	<ul> <li>Used to match commercial Toyo printing inks on coated paper</li> </ul>	
FujiProof	<ul> <li>Used to match the Fuji Color Art System for commercial North American proofs</li> </ul>	
Black and White	Grayscale printing	
	<ul> <li>Used to print page masters for photocopying in black-and-white</li> </ul>	

# Paper tips

- Print the *Paper Tips Page* from the printer's front panel for a detailed list of paper types and sizes.
- When you select a tray by location (Upper, Middle, Lower) from a printer driver, the printer feeds from that tray.
- Always keep stored paper, transparencies, and labels, in sealed packages to avoid the effects of moisture which can affect feed reliability.
- Always use the manual-feed slot for heavy paper and envelopes.
- Handle transparencies by the edges and with both hands to avoid fingerprints and creases, which can result in poor print quality.
- Do not use three-hole punched paper, perforated paper, or an unsupported paper size.

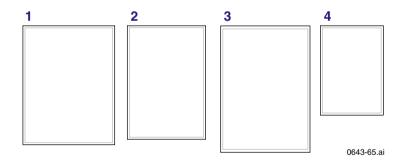
# Supported page sizes and print area

The image area of a print is a bit smaller than the paper size. You may need to adjust the page margins in your application software to match the print area.

To print from a supported driver, select **Print.** Select **Page Size.** Choose one of the following sizes.

Paper*	Page size	Print area	Top/ Bottom margins	Left/ Right margins
1. Letter	8.5 x 11 in.	8.112 x 10.612 in.	.2 in.	.2 in.
2. Executive	7.25 x 10.5 in.	6.85 x 9.95 in.	.275 in.	.2 in.
3. A4	210 x 297 mm	200 x 287 mm	5 mm	5 mm
4. A5	148 x 210 mm	138 x 196 mm	7 mm	5 mm

<sup>\*</sup>Transparencies available in Letter- and A4-sizes only.



Paper Tip:

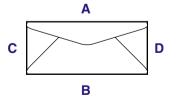
### **Caution**

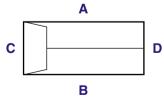
Never use envelopes with windows or metal clasps; they will damage the printer. Use only the recommended envelope sizes. Envelopes must always be placed with the **flap** face-up.

For better results, use light-weight, laser-quality envelopes.

Envelopes	Page size	Print area	Top/ Bottom margins (A/B)	Left/ Right margins (C/D)
#10 (U. S.)	4.13 x 9.5 in.	3.73 x 8.95 in.	.2 in.	.275 in.
#6 ¾ (U. S.)	3.65 x 6.5 in.	3.25 x 5.95 in.	.2 in.	.275 in.
Monarch (U. S.)	3.875 x 7.5 in.	3.475 x 6.95 in.	.2 in.	.275 in.
C5	162 x 229 mm	152 x 197 mm	5 mm	7 mm 25 mm
DL	110 x 220 mm	100 x 206 mm	5 mm	7 mm
Choukei 3 Gou	120 x 235 mm	110 x 221 mm	5 mm	7 mm
Choukei 4 Gou	90 x 205 mm	80 x 191 mm	5 mm	7 mm

Paper Tips





0643-155

# Manual-feed printing

## Supported media

See page 9 for supplies ordering information.

### Paper

- Sizes:
  - A/Letter
  - Executive
  - A4
  - A5
- Bond or equivalent, 60 150 g/m²; 16 40 lb.
- Heavy papers 150 216 g/m<sup>2</sup>: for example, cover stock 216 g/m<sup>2</sup> or 80-lb., and index stock 110-lb.; single-sided printing only
- Coated or Glossy papers, single-sided printing only
- Short-grained paper, at least 105 g/m<sup>2</sup> and up to 150 g/m<sup>2</sup>; 28 40 lb. bond
- Tektronix Premium Cover, single-sided printing only
- Tektronix High Resolution Photo, single-sided printing only

### **Transparencies**

- Sizes: A/Letter and A4
- Use only Phaser 850 printer transparencies

### Labels

- Sizes: A/Letter and A4
- Use only Phaser 850 printer Color Printing Labels

nual-Feed

# Manual-Feed

### **Envelopes**

For better results, use light-weight, laser-quality envelopes.

- #10 (U. S.)
- #6 3/4 (U. S.)
- Monarch (U.S.)
- **C**5
- DL
- Choukei 3 Gou
- Choukei 4 Gou

# Using the manual-feed slot for single-sided printing

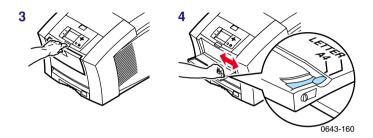
To use the manual-feed slot for single-sided printing, follow these steps. To use the manual-feed slot for two-sided printing, see *Automatic two-sided printing* on page 40.

#### Note

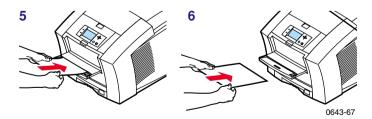
Refer to page 42 for instructions on loading letterhead for two-sided printing.

- 1. In a supported printer driver, select Manual Feed Paper or Manual Feed Transparency.
  - Make sure that two-sided printing is turned off in the printer driver.
- 2. To send the job to the printer, click **Print**.

- 3. Open the manual-feed slot.
- **4.** Align the paper, transparency, or envelope, with the left side of the slot. For either Letter- or A4-size, adjust the guides on the right side of the slot.



- **5.** When the front panel reads **Waiting for Manual Feed**, insert one sheet or envelope until the printer pulls it in:
  - Top of the page enters **first**.
  - Side to be printed is **face-down**.
  - To avoid jams, make sure the sheet or envelope is properly aligned as it enters the printer
  - Check the first print to make sure the image placement is correct.
- **6.** Wait for the front panel's prompt before inserting additional sheets.



# Manual-feed speciality media overview

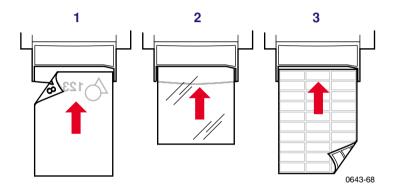
### 1. Letterhead or High-Resolution Photo

See Loading letterhead paper for two-sided printing on page 42 and Printing on High Resolution Photo Paper on page 37 for more information.

### 2. Transparencies

### 3. Labels

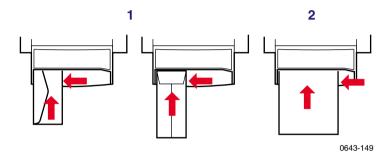
See Printing on labels on page 38 for more information.



### 1. Envelopes

See *Printing on envelopes* on page 26 for more information.

### 2. Executive/A5 small papers

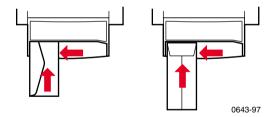


### **Caution**

Never use envelopes with windows or metal clasps; they will damage the printer. Only use the recommended envelope sizes. Envelopes must always be placed with the **flap face-up**.

# Printing on envelopes

- 1. In your application, create a document matching the measurements of the envelope (see *page 19* for dimensions).
- **2.** From your application, make these selections and send the job to the printer:
  - Set the orientation to Landscape.
  - Select your envelope size.
  - Select Manual Feed Paper as the Paper Source.
  - If your application has a tool for creating envelopes, select the feed method that matches the illustration in Step 4.
- **3.** Wait for the front panel prompt before loading an envelope.
- **4.** Insert one envelope into the manual-feed slot:
  - Short end enters first.
    - Side with the **flap** is **face-up**.
    - Flap is closed.
    - For side-flap envelopes: **Flap end** is on the **left**. For end-flap envelopes: **Flap end** enters **first**.



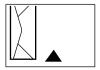
# Guidelines for envelope printing

- Use the recommended envelope sizes (see *page 19*)
- For better results, use light-weight, laser-quality envelopes.
- No windows or metal clasps
- No exposed gummed surfaces
- Single-sided printing only
- Keep unused envelopes in their original packaging to avoid dust
- Many applications include a tool for creating an envelope. Refer to your application's documentation.

# Printing envelopes from a Macintosh

To print envelopes from Microsoft WORD on a Macintosh, follow these steps:

- 1. From the Tools menu, select Envelopes and Labels.
- 2. In the Envelopes and Labels dialog box, click the Envelopes tab.
- **3.** In the **Envelopes** tab, type in delivery and return addresses.
- **4.** Click the **Feed** icon.
- **5.** In the **Printing Options** tab, select all of the following:
  - Face Down
  - Clockwise Rotation
  - Use Envelope Feeder
  - Left envelope feed icon:



0643-148.ai

Envelope

- 7. In the **Envelope size** drop-down list, select your envelope size.
- 8. Click OK.
- **9.** In the **Envelopes and Labels** dialog box, click **Print** to open the **Page Setup** dialog box.
- **10.** In the **Page Setup** dialog box, select all of the following **Page Attributes:** 
  - **Paper:** select your envelope size.
  - Orientation: select Landscape.
- **11.** From the drop-down list, select **PostScript Options**, and make the following selections:
  - **■** Flip Horizontal
  - Flip Vertical
- 12. Click OK; the Print dialog box opens.
- **13.** In the **Print** dialog box, in **General** options, for **Paper Source** select **Manual Feed Paper**.
- 14. Click Print.
- **15.** The printer's front panel prompts you to insert the envelope.

**Envelopes** 

**From other Macintosh applications:** If the envelope address prints upside-down, change the **Page Setup** settings in your printer driver before printing:

- 1. From the File menu, select Page Setup.
- 2. Select the following Page Attributes:
  - Paper: select your envelope size.
  - Orientation: select Landscape.
- **3.** From the drop-down list, select **PostScript Options**, and make the following selections:
  - Flip Horizontal
  - Flip Vertical
- 4. Click OK.
- 5. From the File menu, select Print.
- 6. For Paper Source, select Manual Feed Paper.
- 7. To print, click **Print**.

## **Printing envelopes from Windows**

To print envelopes from Microsoft WORD for Windows, follow these steps:

- 1. From the **Tools** menu, select **Envelopes and Labels**.
- 2. In the Envelopes and Labels dialog box, click the Envelopes tab.
- **3.** In the **Envelopes** tab, type in delivery and return addresses.
- 4. Click the **Feed** icon.
- **5.** In the **Printing Options** tab, select all of the following:
  - Face Down
  - Clockwise Rotation
  - For Feed From, select Manual Feed Paper.
  - Left envelope feed icon:



0643-148.ai

- **6.** Click the **Envelope Options** tab.
- 7. In the **Envelope size** drop-down list, select your envelope size.
- 8. Click OK.
- $\textbf{9.} \quad \text{In the } \textbf{Envelopes and Labels} \ \text{dialog box, click } \textbf{Print.}$
- **10.** The printer's front panel prompts you to insert the envelope.

# Loading the Standard Paper/ Transparency Tray

# Supported media

See page 9 for supplies ordering information.

### Paper

- 200-sheet capacity
- Bond or equivalent, 60 150 g/m², 16 40 lb.
- Heavy papers 150 176 g/m<sup>2</sup>, 40 65-lb.; for example, cover stock  $176 \text{ g/m}^2$  or 65-lb.; single-sided printing only
- Coated or glossy papers, single-sided printing only
- Short-grained paper, 105 150 g/m², 28 40 lb. bond
- Tektronix Premium Cover, single-sided printing only
- Tektronix High Resolution Photo, single-sided printing only
- Set tray switch to Paper.

### Transparencies

- 50-sheet capacity
- Use only Phaser 850 printer transparencies
- Set tray switch to **Transparency**.

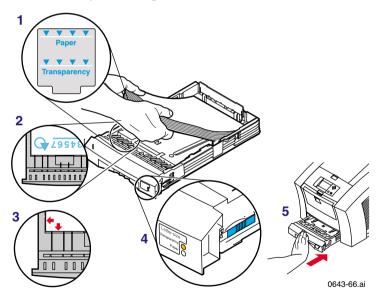
### Labels

- 50-sheet capacity
- Use only Phaser 850 printer Color Printing Labels
- Set tray switch to Paper.

Trays

# Loading the tray

- **1.** Use the tray's maximum-capacity label to determine how much paper or transparency to load.
- **2.** Load paper with the side to be printed **face-up**.
  - For single-sided printing, load letterhead paper with the top of the page at the front of the tray.
  - For two-sided printing on letterhead, refer to page 42.
- **3.** Place the paper snugly against the inside left front wall of the tray.
- **4.** Set the switch on the side of the tray for **Paper** or **Transparency** to match the loaded media. If you are loading labels in the Paper/Transparency tray, set the tray switch to **Paper**.
- 5. Insert the tray into the printer.



# Loading the High-Capacity Paper Tray Assembly

# Supported media

See page 9 for supplies ordering information.

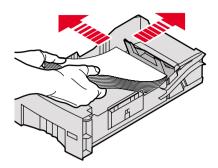
### Paper only

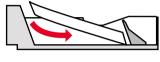
- 500-sheet capacity
- Bond or equivalent, 63 120 g/m², 17 32 lb.
- You can use up to two High-Capacity Paper Tray Assemblies with your printer.

# Loading the tray

- 1. Angle the paper stack to match the angle of the tray.
- 2. Use the tray's maximum-capacity label to determine how much paper to load.
- 3. Load paper with the side to be printed face-up.
  - For single-sided printing, load letterhead paper with the top of the page at the front of the tray.
  - For two-sided printing on letterhead, refer to *page 42*.
- **4.** Place the paper snugly against the inside left back wall of the tray.

### **5.** Insert the tray into the printer.





0389-19

# Loading the optional High-Capacity Transparency/Label Tray

## Supported media

See page 9 for supplies ordering information.

### **Transparencies**

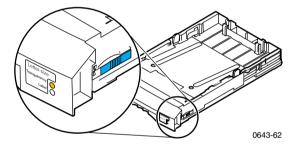
- 175-sheet capacity
- Use only Phaser 850 printer transparencies
- Set tray switch to Transparency.

### Labels

- 100-sheet capacity
- Use only Phaser 850 printer Color Printing Labels
- Set tray switch to Label.

# Loading the tray

- **1.** Use the tray's maximum-capacity label to determine how much media to load.
- 2. Load media with the side to be printed face-up.
- **3.** Place the media snugly against the inside left back wall of the tray.
- **4.** Set the switch on the side of the tray for **Transparency** or **Label** to match the loaded media.
- **5.** Insert the tray into the printer.



- **6.** In the printer driver, make these selections:
  - Select the appropriate tray.
  - Turn off the two-sided printing option.

# רווטנט דמן

# **Printing on High Resolution Photo Paper**

The Tektronix High Resolution Photo Paper is printable on one side only, and has a Tektronix logo on the reverse.

See page 9 for supplies ordering information.

1. Insert the paper into the appropriate tray:

#### Standard Paper/Transparency tray: 50 sheets

- Load paper face-up
- Set tray switch to Paper.

#### Manual-feed slot: 1 sheet

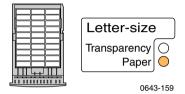
- Load paper face-down
- **2.** In the printer driver, make these selections:
  - Select the appropriate tray.
  - Turn off the two-sided printing option.
  - Select High-Resolution Photo as the TekColor color correction.
- 3. Send the job to the printer.

spels

1. Insert the label sheets into the appropriate tray:

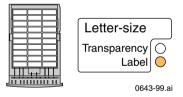
#### Standard Paper/Transparency tray: 50 sheets

- Face-up
- Set tray switch to Paper.



#### High-Capacity Transparency/Label tray: 100 sheets

- Face-up
- Set tray switch to **Label**.



#### Manual-feed slot: 1 sheet

■ Face-down



- 2. If your application has a setting for labels, use it as a template. Otherwise, for margin settings, refer to the instructions included with the labels.
- 3. In the printer driver, make these selections:
  - Select the appropriate tray.
  - Turn off the two-sided printing option.
- **4.** Send the job to the printer.

See page 9 for supplies ordering information.

## Guidelines for printing on labels

- Use only Phaser 850 printer Color Printing Labels.
- If any of the labels on a sheet are missing, do not use that sheet; it may damage printer components.

#### **Caution**

Keep labels in a cool, dry place. Never store labels in a high-humidity environment. Labels stored under such conditions will jam in the printer. Store unused labels flat in their containers. Rotate stock frequently. Long periods of storage can cause the labels to curl and will jam the printer. \_abels

# 2-sided Prints

## Automatic two-sided printing

Automatically make two-sided prints using the paper trays or the manual-feed slot. In the Print dialog box, select the two-sided printing option and a binding preference (how the page turns).

#### To automatically make two-sided prints:

- Do not place paper that was printed on one side back into the printer to print on the second side. Pre-printed pages may stick together.
- Make sure the Paper/Transparency switch on the tray is set to **Paper**.
- Use only Letter- or A4-size paper.
- When the printer operates in automatic two-sided printing mode, the paper partially exits before printing the second side. To avoid paper jams, do not touch the paper before it completely exits the printer.

#### **Caution**

Two-sided printing is supported only for Letter- and A4-size papers within the 16 - 32 lb. range. Make sure two-sided printing is off in the printer driver for all other paper types.

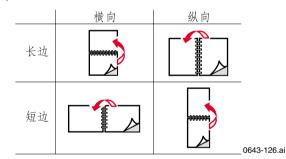
#### **Macintosh Drivers**

LaserWriter 8.6	■ From the File menu, select Print.
	<ul><li>From the pull-down menu, select Layout.</li></ul>
	<ul><li>Select Print on Both Sides.</li></ul>
	<ul> <li>Select a binding preference.</li> </ul>
LaserWriter 8.3.4	■ From the File menu, select Print.
	<ul> <li>Click the <b>Options</b> button.</li> </ul>
	<ul><li>Select 2-Sided Printing.</li></ul>
	■ Select Short-Edge Binding or Long-Edge Binding.

## **PC Drivers**

Windows 95	From the File menu, select Print.
Windows 98	<ul><li>Click Properties.</li></ul>
	<ul><li>Click the <b>Setup</b> tab.</li></ul>
	■ Select <b>Print on 2 sides.</b>
	<ul><li>Check or uncheck Bind on top edge.</li></ul>
Windows NT4	■ Start/Settings/Printers.
	<ul> <li>Right-mouse-button-click on your printer's icon.</li> </ul>
	<ul><li>From the pop-up menu, select <b>Document</b> <b>Defaults.</b></li></ul>
	<ul><li>Click the Advanced tab.</li></ul>
	<ul><li>Under Paper/Output, select Print on Both Sides.</li></ul>
	Select Long Side or Short Side.

# Binding preference



wo-sided Prints

## Loading letterhead paper for two-sided printing

To load letterhead paper for two-sided printing, follow these additional steps.

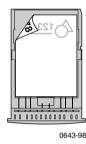
#### **Caution**

Do not place paper that was printed on one side back into the printer to print on the second side. Pre-printed pages may stick together.

- 1. Load the paper in the paper tray or the manual-feed slot:
  - Paper tray

Letterhead side is face-down.

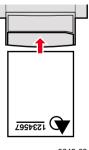
Place the **top** of the page at the back of the tray.



#### Manual-feed slot

Letterhead side is face-up.

Top of the page enters the printer last.



0643-69

- **2.** In your printer driver, in the **Print** dialog box, select the tray by location:
  - Upper
  - Middle
  - Lower
  - Manual Feed Paper

#### Note

When the printer operates in automatic two-sided printing mode, the paper partially exits before printing the second side. To avoid paper jams, do not touch the paper before it completely exits the printer.

# Adding ink

#### Caution

Use only Phaser 850 printer ColorStix® ink; the use of other ink may affect print quality and reliability. Tektronix warranties and service contracts do not cover damage, malfunction or degradation of performance caused by the use of non-Tektronix supplies or consumables or the use of Tektronix supplies not specified for use with this printer.

See page 9 for supplies ordering information.

#### Ink tips:

- Keep ink in its packaging until you are ready to use it.
- To avoid ink jams, never insert broken ink sticks into the ink-loading bins.

#### Loading ink:

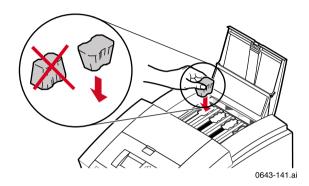
To load ink any time the printer is Idle, or when the front panel displays **Ink low** or **Ink out**, follow this procedure.

- 1. Open the top cover. A color-coded label inside the top cover corresponds to the color of each ink-loading bin.
- **2.** Remove the ink stick from its packaging.

Adding IIII

**3.** Place the appropriate color ink stick into the ink-loading bin that appears low. Do not force the ink sticks into the ink-loading bins.

Each ink stick is uniquely shaped to fit into the correct ink-loading bin. Insert the ink stick's narrow end first.



**4.** Close the top cover.

The front panel may read  $\mbox{\bf Processing}$  until the printer is ready for printing.

## Emptying the waste tray

When the front panel displays **Empty Waste Tray**, follow this procedure.

See page 9 for supplies ordering information.

#### **Caution**

The printer's interior may be hot. Do not reach into the printer while the maintenance drawer is removed.

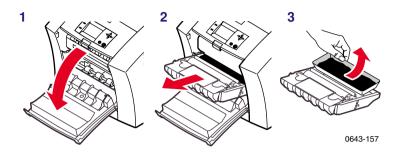
- 1. Open the front cover.
- **2.** Grasp the maintenance drawer, labeled as **A**, and pull it out of the printer.

#### Note

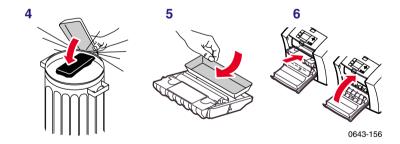
The maintenance drawer may be locked while the ink cools after the front panel troubleshooting routine, **Eliminate Light Stripes.** Make sure all covers are closed. Wait 15 minutes before trying to remove the maintenance drawer. The maintenance drawer may also be locked during the warm up cycle whenever the printer is turned on.

3. The waste tray may be hot; handle it carefully.

Lift the waste tray, labeled as **B**, from the maintenance drawer.



- **4.** Empty the waste tray by gently twisting the tray or tapping it on the sides of a waste container. Ink is non-toxic and can be discarded as normal office waste.
- **5.** Replace the waste tray in the maintenance drawer. Make sure the waste tray is seated flat in the maintenance drawer.
- **6.** Reinsert the maintenance drawer into the printer and close the front cover.



# Replacing the Maintenance Kit

The Maintenance Kit is a consumable that consists of the maintenance roller and counter. The kit is located in the Maintenance Drawer, labeled as **A**, behind the printer's front cover.

Detailed, illustrated instructions are included with each new Maintenance Kit. See page 9 for supplies ordering information.

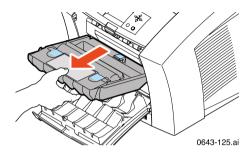
The front panel displays these messages:

Front panel message	Action
Maintenance Kit is low	Order a replacement maintenance kit; replace the Maintenance Kit soon.
Replace Maintenance Kit	Replace the Maintenance Kit to continue printing.
	Make sure the new counter is installed.
Maintenance Kit Missing	Reinstall the counter or maintenance drawer.
Preventative Maintenance: Replace Maintenance Kit	Press the Help button on the front panel for details.

- The Standard Maintenance Kit has a life of 10,000 prints or 2 years, whichever comes first.
- The Extended Maintenance Kit has a life of up to 45,000 prints (depending on ink coverage) or 2 years, whichever comes first.

#### Caution

The printer may be hot. Do not reach into the printer while the maintenance drawer is removed.



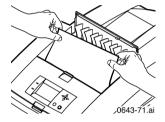
Maintenance Kit

# Removing paper jams

The front panel message indicates the jam location and information on how to clear the jam. Check the front panel for **Troubleshooting Jams** information.

To prevent jams, use **only** the recommended papers, transparencies, and labels (see *page 18*), and clean the printer's rollers if visibly dirty. For complete cleaning instructions, refer to the printer's CD-ROM or on the Tektronix web site.

## Media Jam - Open Exit Cover to Clear



#### **Solution 1**

If the paper has partially exited the printer at the exit slot, follow these steps. Otherwise, refer to *Solution 2* on page 51.

- 1. Open the exit cover.
- 2. Using both hands, remove the jammed paper.
- **3.** Remove the entire sheet of paper; any pieces of paper left in the printer may cause more jams.

Jams

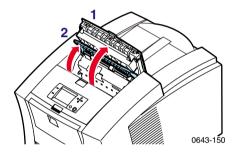
#### **Solution 2**

If paper gets caught under the Rapid Release Guide, follow these steps.

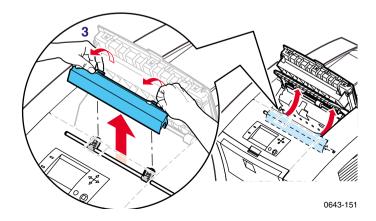
#### **Caution**

Handle the Rapid Release Guide carefully to avoid bending or damaging the clear plastic edge.

- 1. Open the exit cover.
- 2. Lift the blue paper guide.



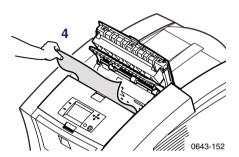
**3.** Lift up on the blue tabs and remove the Rapid Release Guide. Do not use any sharp objects in this area of the printer.



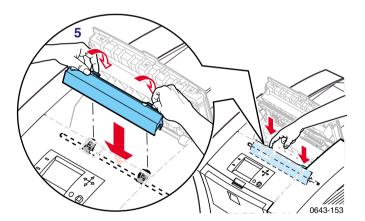
User Guide 51

Jams

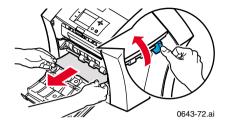
4. Remove the jammed paper.



**5.** Make sure the thin, white dust shield is lying on top of the metal shaft. Then, reinstall the Rapid Release Guide, pressing down on the blue tabs to snap the guide into place.

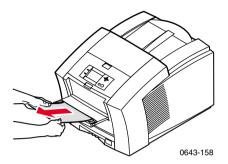


# Media Jam — Open front cover to clear



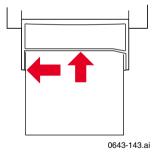
- 1. Open the front cover.
- 2. Using both hands, remove the jammed paper.
- **3.** If there is any resistance to removing the jammed paper, turn the blue thumbwheel to help feed the paper.
- **4.** Remove the entire sheet of paper; any pieces of paper left in the printer may cause more jams.

## Media Jam — Retry manual feed

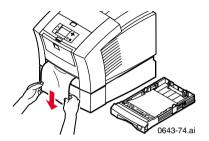


- 1. Using both hands, remove the jammed paper, transparency, or label sheet.
- **2.** When prompted by the display message, reinsert the sheet using both hands.

Make sure you insert the sheet properly, so it enters the printer straight and evenly. Be especially careful to properly line up envelopes and small-size papers.

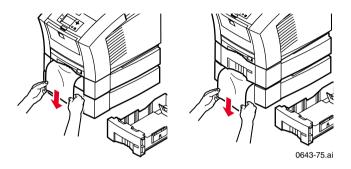


## Media Jam — Remove media (or upper) tray to clear



- 1. Remove the paper tray (if your printer has more than one tray, pull out the upper tray).
- 2. Using both hands, remove the jammed paper.

# Media Jam — Remove middle tray to clear Media Jam — Remove lower tray to clear



- 1. Remove the paper tray named in the front panel display.
- 2. Using both hands, carefully remove the jammed paper.

# Troubleshooting print quality

## Light stripes or missing colors

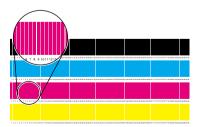
Clean the printhead with the printer's front panel troubleshooting routine.



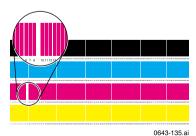
0643-56.ai

- 1. On the front panel, scroll to Menu. Press Select.
- 2. Scroll to Troubleshooting; press Select.
- **3.** Scroll to **Print Diagnostic Test Page**; press **Select.** These illustrations show a correct Test Page and an example of a Test Page with a missing color bar.

#### A. Correct test page



B. Missing color bar



User Guide 57

Print Quality

- **4.** If the test print looks like example  ${\bf B}$  in the illustration, go on to Step 5.
- 5. Scroll to Eliminate Light Stripes; press Select.
- **6.** Check the test print that prints automatically, to confirm that the problem is corrected.
- 7. Repeat Step 5 as necessary. If light stripes persist after three consecutive clean cycles, turn off the printer for 4 hours to allow the ink to cool and solidify. Then turn on the printer and repeat the clean cycles, if necessary.

For more details, refer to the troubleshooting information on the printer's CD-ROM or on the Tektronix web site.

## Oil or ink smears

Oil (drum fluid) on a print or ink smears on the front, back or edges of a page.



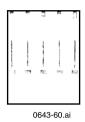
0043-39.a

Clean the printer's internal paper path using the front panel troubleshooting routine.

- 1. Load the upper tray with sheets of clean, high-grade paper, preferably  $120 \text{ g/m}^2$ ; 32-lb. This cleaning routine uses several sheets of paper.
- 2. On the front panel, scroll to Menu. Press Select.
- 3. Scroll to Troubleshooting; press Select.
- 4. Scroll to Remove Ink Smears; press Select.
- **5.** If the problem persists, additional cleaning may be necessary. For complete cleaning instructions, refer to the printer's CD-ROM or on the Tektronix web site.

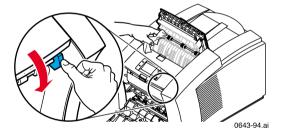
## Ink streaks

Ink streaks or marks on the top edge, front or back of a page.



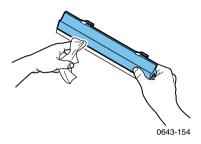
#### Clean the printer's paper-exit path:

- To clean the exit rollers, use a pre-soaked alcohol cloth.
- To turn the rollers, use the blue thumbwheel.



#### Clean the Rapid Release Guide:

- 1. Follow the steps in *Solution 2* on page 51 to remove the Rapid Release Guide.
- **2.** Gently wipe the clear plastic Rapid Release Guide with a pre-soaked alcohol cloth.



3. Reinstall the Rapid Release Guide, pressing down on the blue tabs to snap the guide into place.

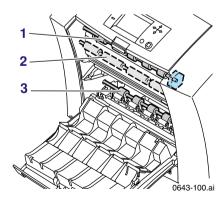
#### Ink smears

Ink smears on the bottom edge of a page.



Clean the paper-feed rollers.

- 1. From the front panel, run the **Remove Ink Smears** routine; see page 59 for instructions.
- **2.** If smears remain, open the front cover and remove the maintenance drawer.
- **3.** To clean rollers in rows **1, 2,** and **3,** use a pre-soaked alcohol cloth.
- **4.** To turn the rollers in rows **1** and **3**, use the blue thumbwheel.



**5.** Clean any ink from the polished metal guide located between rollers 1 and 2, using a presoaked alcohol wipe.

## Moving the printer

#### All moves

Follow these guidelines when moving the printer within the office and preparing it for shipment:

- 1. The printer must be cool before moving it; otherwise, ink spills may damage the printer. Use this method:
  - **a.** Close all of the printer's covers and doors.
  - **b.** Turn off the printer. Before the front panel goes blank (*you have only 4 seconds*), select **Shut Down For Moving Printer.**
  - **c.** The printer takes about 15 minutes to cool; during that time, the front panel reports its progress. When the cool-down is complete, the front panel goes blank. It is now safe to move the printer.
- **2.** Removing the upper paper tray provides a place for your hands when lifting the printer.
- **3.** Always move the printer separately from its High-Capacity Paper Tray Assembly.





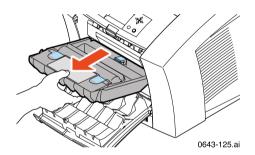
## Preparing the printer for shipment

#### **Caution**

Parts of the printer may be hot; to avoid personal injury, allow the printer to cool and use caution when handling it.

- Always repack the printer properly to ensure its safe shipment; refer to the instructions on the printer's CD-ROM or on the Tektronix web site.
- Always remove the maintenance drawer (A) before shipment to avoid damage to the printer. Place the drawer in a plastic bag for storage. Never ship the printer with the maintenance drawer installed.





## **Getting help**

The printer's auto-running CD-ROM guides you to the various resources available for installing and learning more about your Tektronix color printer. Use the CD-ROM to install your printer driver software, view and print user documentation, and watch "how to" videos. Live Internet links on the CD-ROM let you access the Tektronix Color Connection web site, your single source for color education, interactive tutorials, free templates and support information.

#### **Printer CD-ROM**

- Advanced Features and Troubleshooting Manual
- Consumables instructions
- Setup Guide poster
- Video help
- Networking manuals
- Cleaning instructions
- Repacking instructions
- Printer drivers
- Material Safety Data Sheets (MSDS)

## Windows driver help system

Install the driver from the printer's CD-ROM and use the embedded help system.

- Troubleshooting information
- Access to installed manuals and videos
- Live links to the Tektronix web site

Getting Help

#### **Color Connection**

#### colorconnection.tektronix.com

Color resource for tools and information to help you get the most out of your color printer:

- Customized support and automatic driver update notification.
- Color education with interactive tutorials and helpful hints.
- Free templates and promotions.
- Online supplies ordering
- Online documentation.

## Printer's front panel

- **Help** menu: Accesses information and tools for solving printer problems.
- **Help** button: Press at any time for additional information on displayed menu options or status messages.
- **Troubleshoot Jams** menu: Appears when paper jams, provides additional information.

## Internal printer pages

The printer has several help pages available; refer to the Menu Map for their locations.

- **Connection Setup:** connecting to a computer or network
- **Diagnostic Test Page:** how to solve print problems, such as smudges or light stripes
- **Help Guide:** Provides specific help resources.
- Paper Tips Page: what papers, transparencies, or labels to use
- Supplies Page: part numbers and descriptions

**Getting Help** 

## PhaserLink™ Software

#### www.tek.com/Color\_Printers/products/ phaserlink.html

- View printer status using any web browser
- Control printer settings
- Link to online documentation via the World Wide Web
- Requires network connection via TCP/IP

## Tektronix web site

#### www.tek.com/Color\_Printers/

- Product and supplies information
- Finding your local reseller

## TekSMART™ Knowledge Base

#### www2.tek.com/TekSMART/

- Application issues
- Networking issues
- Printer errors
- Print quality issues
- Troubleshooting
- Latest tips from technical support

#### Other online services

Anonymous ftp server	ftp.tek.com/Color_Printers/
Subscribe to email update notices	www.tektronix.com/Color_Printers/support/subscribe.html

## **Customer Support Centers**

**Australia** 1-800-811-177

**Austria** 0660 5804

**Belgium** 02 720 9602

**Brazil** 0800 16 0220

**Canada** 1-800-835-6100

**China** 10-6235-1230

**Denmark** (44) 533 444

Eastern Europe and the Middle East +44 1908 68187

Finland 0203 206 30

France 01 69 86 8137

**Germany** 0180 525 3535

Hong Kong 2585-6655

India (South Asia) (91) 80-227-5577

Italy

02 45 287 000

**Japan** 81 3 3448 4872

**Korea** 2-528-4661

Luxembourg 400 847

**Netherlands** (040) 267 0440

New Zealand +61 2 9888 0100

Norway 22 723 801

**Singapore (ASEAN)** 1-800-356-5565

**Spain**902 239 272 **Sweden**(08) 299 071 **Switzerland** 

Switzerland 01 212 2212 Taiwan

(02) 2757-1571

**Thailand** 2-645-4407

U. K.

(01) 908 681 707

U. S.

1-800-835-6100

# **Printer Management**

## PhaserLink Printer Management software

PhaserLink Printer Management software is a printer management tool that uses World Wide Web technology to provide printer information and functionality:

- Job status
- Job accounting
- Printer usage
- Routine troubleshooting
- Configuration of printer settings

PhaserLink requires a TCP/IP connection. To access PhaserLink information, enter your printer's IP address in a web browser. The PhaserLink interface appears on your computer's screen.

For detailed information on PhaserLink Printer Management software, refer to "PhaserLink Printer Management software: The Printer's Information Link" on the printer's CD-ROM or web site. Or enter this address in your web browser:

www.tektronix.com/Color\_Printers/products/phaserlink.html

# **Job Accounting**

The printer stores a log file containing information about jobs printed. The file is a list of job accounting records. Each record contains fields such as user name, job name, pages printed, job times, and ink used. Job accounting is available through the PhaserShare Administrator and PhaserLink Printer Management software.

For more information on Job Accounting, see the *PhaserShare Networking Manual* on the printer's CD-ROM or web site.

## TekSMART™ Knowledge Base

#### www2.tek.com/TekSMART/

- Application issues
- Networking issues
- Printer errors
- Print quality issues
- Troubleshooting
- Latest tips from technical support

# **Usage Profile**

Usage Profile provides a proactive strategy for service, maintenance, and administration of your printer. With Usage Profile, you can keep track of most printer parameters in detail.

Information in the Usage Profile Report includes:

- Remaining life of consumables
- Paper versus transparency usage
- Number and location of media jams
- Media tray usage
- Number of pages printed

Print the Usage Profile report from your printer's front panel. Refer to the Menu Map for location and instructions.

In addition, you can easily arrange electronic mail notification so that your system administrator or supplies-ordering agent receives timely information on error conditions or supplies status. This feature allows you to predict the ordering needs of customer-replaceable consumables for remote locations. These types of error conditions are reported:

- For the designated operator, system administrator or service provider
  - Supplies (customer-replaceable consumables) low or out
  - Empty media tray
- For the system administrator
  - Printer configuration
- For the service provider
  - Error conditions requiring hardware service repair

For detailed information about the Usage Profile report, refer to the Tektronix web site.

# **Fonts**

# Resident typefaces (PostScript)

The printer accepts Adobe Type 1 and Type 3 downloadable fonts, TrueType fonts, PCL5, and a variety of user-defined fonts.

To extend font capability, the printer supports an optional internal IDE hard drive for storage of additional fonts. Refer to the printer's user guide, or the Tektronix web site, for ordering information.

ATM (Adobe Type Manager) software (provided on the printer's CD-ROM) helps your computer to display these fonts on screen as they will appear in your prints.

All printer configurations are shipped with 136 resident fonts. To print a sample of the printer's fonts, see *page 74*.

# Resident typefaces (PCL5C)

For PCL5C (Printer Command Language) printing, the printer supports Courier, Times, and Universe typefaces in medium, bold, italic medium, and italic bold. In addition, there are 46 PCL fonts. The printer port must be set to **AutoSelect** (which is the default) for the printer to accept PCL data.

# **Downloading fonts**

Printer-resident fonts are always available for printing. Additional downloadable fonts can be sent from your computer and stored in the printer's memory or on a hard disk. Adding more printer memory expands the number of fonts that can be stored on your printer.

Downloading fonts saves print time when printing large, or several documents, that use those fonts.

The printer accepts these (and other) downloadable fonts:

- Type 1
- Type 3
  - Adobe
  - Agfa
  - Bitstream
  - Microsoft
  - Apple
- TrueType (scalable to any point size; look the same on-screen and printed).

Before printing, make sure that the fonts specified in your document are installed in the printer or are set up correctly. If you request a font in an application that is not resident in the printer, or is not correctly installed, the text is printed in Courier typeface.

Refer to the printer's user guide, or the Tektronix web site, for information on ordering a hard drive for font storage.

# Downloading fonts from a Macintosh

- **1.** Refer to *Downloading files to the printer from a Macintosh* on page 95 to locate the Apple Printer Utility on the printer's CD-ROM.
- 2. Within the Apple Printer Utility, click **Open Printer**; a dialog box appears.
- 3. Click the arrow next to **Printer Preferences**.
- **4.** For a list of installed fonts and locations, click the arrow next to **Fonts**.
- 5. Click Add.
- **6.** Select your font folder, then select the font you want to download.
- **7.** Under **Destination**, select the download location: either the printer's memory or an internal hard disk.
- 8. Click Add for one font or click Add All for all fonts in the folder.
- **9.** Click **Send**; the font(s) appear in the list.

### Note

To remove downloaded fonts, click Remove.

# Printing a list of resident fonts

### From a Macintosh

- 1. Refer to *Downloading files to the printer from a Macintosh* on page 95 to install and use the *Apple Printer Utility*.
- 2. Within the Apple Printer Utility, from the File menu, select Print Font Samples.

### From a PC or workstation

- 1. Insert the printer's CD-ROM into the CD-ROM drive.
  - If the Windows autorun feature is enabled, the CD-ROM launches automatically.
  - If the Windows autorun feature is disabled, double-click **My Computer**, then double-click the CD icon to launch the CD-ROM.
- 2. For **Setup Type**, select **Custom**.
- **3.** Click **Next** until the **Choose Components and Sub-components** dialog box appears. Make the following selections:
  - Components: Graphics Arts Files
  - Sub-components: Samplers
- **4.** Follow the on-screen instructions to complete the installation.
- 5. Locate the files in the folder you selected during the installation; the default is: C:Program Files\Tektronix\Phaser xxx, where xxx is your printer's name.
- **6.** Refer to *Downloading files to the printer from a PC* on page 97 for file downloading instructions.

# **Image Smoothing**

**Image Smoothing** blends adjacent colors in low-resolution images for smoother color transitions. For example, use **Image Smoothing** to improve the appearance of a 72-dpi image downloaded from the World Wide Web. **Image Smoothing** is not recommended for 300-dpi or higher images.

There are four ways of selecting **Image Smoothing** (driver selections override all other settings):

- 1. In a supported driver, locate the **Image Smoothing** option:
  - LaserWriter 8.3.4 driver:
    In the Print dialog box, click Options.
  - LaserWriter 8.5.1 driver:
    In the Print dialog box, from the pull-down menu (General) select Printer Specific Options.
  - Windows 95 / Windows 98 PostScript driver: Start/Settings/Printers, then select Properties for your printer. In the Setup tab, select Expert Options.
  - Windows 2000 driver:
    From the Layout tab or Paper/Quality tab, click Advanced.
  - Windows NT driver:
    From the Properties tab, select the Advanced tab. From the Document Options tab. select Printer Features.
  - Adobe PS3 driver for Windows 3.1: Select the Features tab options.
- 2. Through the printer's front panel; see the **Menu Map** for location.
- 3. Through PhaserLink Printer Management software.
- **4.** Through one of the following PostScript utility files (see *Printer Utilities* on page 91 for instructions):

### Macintosh

- Image Smoothing On
- Image Smoothing Off

#### PC

- SMOOTHON.PS
- SMOOTHOFF.PS

# **Quick Collate**

### Requirements

- DP or DX Feature Set
- Hard drive (internal)

**Quick Collate** speeds the collation and printing of large print jobs and multiple sets of documents. The collate function in some software applications repeatedly sends each page in sequence to the printer until the requested number of copies is printed. With the **Quick Collate** option, the job is sent only once and then multiple collated sets are produced by the printer, allowing much faster processing time.

The number of pages that can be collated at one time depends on the size of the hard disk installed in the printer.

### Note

Make sure that you turn off the collate function in your application, because the printer's **Quick Collate** option is faster than the collate function in software applications.

In a supported driver, locate the **Quick Collate** option:

- LaserWriter 8.3.4 driver:
  In the Print dialog box, click Options.
- LaserWriter 8.5.1 driver:
  In the Print dialog box, from the pull-down menu (General) select Printer Specific Options.
- Windows 95 / Windows 98 PostScript driver: Start/Settings/Printers, then select Properties for your printer. In the Setup tab, select Advanced Paper Options.
- Windows 2000 driver:
  From the Layout tab or Paper/Quality tab, click Advanced.
- Windows NT driver:
  - From the **Properties** tab, select the **Advanced** tab. From the **Document Options** tab, select **Printer Features**.
- Adobe PS3 driver for Windows 3.1: Select the Features tab options.

#### **Quick Collate and 1st Page Preview**

When you use the printer's **Quick Collate** option with **1st Page Preview**, only the first page of the first set is printed before pausing for your review.

# **Separation Pages**

You can have the printer insert a separation page, or divider page, to separate print jobs, multiple copies of a single print job, or individual pages of a print job.

There are two selections to make in your printer driver.

- 1. In a supported driver, locate the **Separation Page** options:
  - LaserWriter 8.3.4 driver:
    In the Print dialog box, click Options.
  - LaserWriter 8.5.1 driver:
    In the Print dialog box, from the pull-down menu (General) select Printer Specific Options.
  - Windows 95 / Windows 98 PostScript driver: Start/Settings/Printers, then select Properties for your printer. In the Setup tab, select Advanced Paper Options.
  - Windows 2000 driver:
    From the Layout tab or Paper/Quality tab, click Advanced.
  - Windows NT driver:
    From the Properties tab, select the Advanced tab. From the Document Options tab, select Printer Features.
  - Adobe PS3 driver for Windows 3.1: Select the Features tab options.
- 2. Select one of the following for **Separation Page**:
  - Off: Turns off the Separation Page feature.
  - **End of Job:** Inserts a separation page between individual print jobs.
  - **End of Set:** Inserts a separation page between copies, or sets, of a multi-copy print job.
  - **End of Page:** Inserts a separation page between every page of a print job.
- **3.** Select one of the following for **Separation Page Source**:
  - Upper Tray: Takes paper for the separation page from the upper media tray.
  - **Middle Tray:** Takes paper for the separation page from the middle media tray, if you have optional paper trays installed.
  - **Lower Tray:** Takes paper for the separation page from the lower media tray, if you have optional paper trays installed.

# **PANTONE Colors**

For the latest information on color libraries, visit the Tektronix web site at:

### www.tektronix.com/Color\_Printers/

or contact your local Tektronix reseller.

PANTONE Color files for your printer include printer-specific color library files for some specific applications and a file to print the PANTONE Color sampler chart.

# Methods of printing PANTONE Colors

### PANTONE Colors from color selection books

In some applications, you can select colors from PANTONE Color selection books. These colors can be proofed on your Phaser printer before final output on a printing press. For this method, the printer-specific PANTONE Color files are not required.

- 1. From an application, select and apply PANTONE Colors; use individual color values from a PANTONE Colors selection book.
- 2. Print your document; from a supported driver, select the Commercial Press color correction. (Proof colors may not be completely accurate, but PANTONE Colors will be printed correctly on a printing press.)
- **3.** When you are satisfied with the proof, the file can be separated for printing press plates without adjustment to the file.

# **Printer-specific PANTONE Colors**

Your printer can produce process color simulations of PANTONE Spot Colors.

- **1.** Print a copy of the PANTONE Color chart. Refer to *Printing the PANTONE Color Chart* on page 80.
- **2.** Within an application, define the desired color in your document by using the individual CMYK values which appear on the sampler chart.
- 3. Print your document. For best results, use the same printer settings for color correction and print quality, and the same type of paper that you used to print the PANTONE Color chart.

#### For final output on a color printing press

For colors to be printed as a process color (no spot colors), follow these steps:

- 1. Open the application.
- **2.** Before separating the file for printing press plates, replace the printer's PANTONE process Colors with standard PANTONE Colors.

# **Installing the PANTONE Color files**

### From the Web

**1.** Download the appropriate PANTONE Color file for your printer from the Tektronix web site:

### www.tektronix.com/Color\_Printers/

**2.** Choose a directory location, and extract the file.

# **Printing the PANTONE Color Chart**

### Macintosh

### Printing individual pages from Acrobat Reader

- 1. You will need to install Acrobat Reader if you want to print individual pages from the PANTONE Color chart. Insert the printer's CD-ROM in your computer's drive, go to the *Utilities* folder, and install Acrobat Reader onto your computer's hard disk; follow on-screen instructions.
- **2.** After Acrobat Reader is installed, locate the Pantone files you downloaded from the web site. Double-click the desired PDF file.
- **3.** View and print pages from the PDF file. For best results, print on paper.

#### Note

Print only with the None Color Correction setting; other settings cause PANTONE Colors to print differently than expected.

### Printing the entire chart

- Use the *Apple Printer Utility* to download to the printer the desired PANTONE Color PostScript file, refer to *page 91* for instructions. This PostScript file contains necessary color correction and print quality settings.
- For best results and truest color:
  - Print the chart on paper that is similar to the paper that will be used on the printing press.
  - Turn off two-sided printing when printing the color chart in order to reduce the effects of color show-through.

### PC

### Printing individual pages from Acrobat Reader

- You will need to install Acrobat Reader if you want to print individual pages from the PANTONE Color chart. Insert the printer's CD-ROM in your computer's drive, go to the *Utility* directory, and install Acrobat Reader onto your computer's hard disk; follow on-screen instructions.
- **2.** Click Start, then Programs, then the program folder you selected; the default is the printer's name.
- **3.** Select the PDF file.
- **4.** View and print pages from the PDF file. For best results, print on paper.

#### **Note**

Print only with the None Color Correction setting; other settings cause PANTONE Colors to print differently than expected.

### Printing the entire chart

Print the PANTONE Color chart by sending the PANTONE PostScript file to the printer. Refer to *page 91* for downloading instructions.

- For best results and truest color:
  - Print the chart on paper that is similar to the paper that will be used on the printing press.
  - Turn off two-sided printing when printing the color chart in order to reduce the effects of color show-through.

# PhaserPrint Plug-in for Photoshop

The PhaserPrint<sup>™</sup> plug-in, included on the printer's CD-ROM, operates within the Photoshop application. With PhaserPrint, you can improve image transfer time and gain easy access to Tektronix printer features and other media features.

PhaserPrint software produces correct output only on supported Tektronix printers.

#### Note

If you use this plug-in with a printer not listed in the PhaserPrint dialog box, the image may be placed incorrectly on the page, or colors may look incorrect, or your file may not print.

# Installing the plug-in: Macintosh

#### Note

The PhaserPrint Plug-in is automatically installed with the software installation option **Easy Install**.

### **Compatibility requirements**

- Photoshop 2.5.1 and higher
- System 7.0 and higher

### Installing the plug-in

- 1. From the printer's CD-ROM, run the *Installer* application. Select **Custom Install**.
- **2.** Select **PhaserPrint plug-in for Photoshop**. Click **Install**; the file is installed in the Photoshop application's *Plug-ins* folder on your computer's hard disk.

# Installing the plug-in: Windows

### **Compatibility requirements**

- Photoshop 4.0 and higher
- Windows 95/Windows 98 or Windows NT
- (optional) TCP/IP support requires proper installation of IP networking software and cards

### Installing the plug-in

- 1. Insert the printer's CD-ROM into the CD-ROM drive.
  - If the Windows autorun feature is enabled, the CD-ROM launches automatically.
  - If the Windows autorun feature is disabled, double-click **My Computer**, then double-click the CD icon to launch the CD-ROM.
- 2. For **Setup Type**, select **Custom**.
- **3.** Click **Next** until the **Chose Components and Sub-components** dialog box appears. Make the following selections:
  - Components: **Printer Driver**
  - Sub-components: Photoshop plug-in
- **4.** Follow the on-screen instructions to complete the installation.

# Using the plug-in

- 1. If you don't already have a default printer selected, do the following:
  - Macintosh:
  - a. Open the Chooser.
  - **b.** Select a PostScript driver (such as the Apple LaserWriter 8); select your printer. PhaserPrint software works like a printer driver, and prints to the printer you selected in the Chooser.
  - **■** Windows:
  - a. Click Start, then Settings, then Printers.
  - **b.** Right-mouse-button-click on your printer's icon.
  - c. In the pop-up menu, select Set as Default.
  - **d.** Within the PhaserPrint software, select your printer and port, as described in *Print using (Windows)* on page 86.
- 2. Open Photoshop. Open an image file.
- **3.** From the **File** menu, select **Export**. Select **PhaserPrint**; the PhaserPrint dialog box appears.
- 4. In the **Printer Model** field, select your printer.
- 5. PhaserPrint software supports the following image modes selected from Photoshop's **Mode** menu. If you select a mode not listed here, an error message appears and your image is not printed.
  - Bitmap
  - Grayscale
  - Indexed Color
  - RGB Color
  - CMYK Color
  - Lab Color

# Selecting options in the PhaserPrint dialog box

Settings you make in the PhaserPrint plug-in remain in effect until you change them. The exception is Number of Copies, which defaults to 1 each time you start the plug-in.

#### Note

You can get information on any of the plug-in's features or printer-specific options with the online **Help** function.

# **Number of copies**

Enter the number of copies to print, from 1 to 1000.

### Print using (Macintosh)

The **Print using** pop-up menu lets you choose between printing an image or saving the image to disk.

- **AppleTalk:** Prints the image to the printer currently selected in the Chooser; the currently selected printer name is displayed in the **Printer model** field. If the selected printer is not a PostScript printer, this option is unavailable (grayed-out).
- **PostScript file:** Saves an image to disk as a PostScript file. Click **Save**; a dialog box lets you choose a new or existing file for saving the PostScript code.

When selected, the **File format** pop-up menu becomes available. This pop-up menu has two options: **ASCII base-85** and **Binary**.

- ASCII base-85: Image data is encoded using an ASCII base-85 filter during file output, making the resulting PostScript file portable, and downloadable through interface ports that don't support binary data. Note that the file may be up to 25% larger.
- **Binary:** Image data is output in binary format.

# Print using (Windows)

The **Print using** pop-up menu lets you choose between printing an image or saving the image to disk. It has two to four options, depending on your system configuration:

- TCP/IP: Available if a TCP/IP stack is installed and running. From Printer model, choose a printer. Add and delete printers in the list, and edit the printer configurations. TCP/IP is the fastest printing method; it prints jobs in much less time than the Local Port or Printer Driver methods, and is the recommended method if it is available for the printer you are using.
- Local Port: Available if you have local ports installed in your PC. From the Port Name, choose the desired printer port.
- **Printer Driver:** Prints the image through the selected printer driver. From **Driver** Name, choose a printer.
- **PostScript file:** Saves an image to disk as a PostScript file. Click **Save**; a dialog box lets you choose a new or existing file for saving the PostScript code.

When selected, the **File format** pop-up menu becomes available. This pop-up menu has two options: **ASCII base-85** and **Binary**.

- ASCII base-85: Image data is encoded using an ASCII base-85 filter during file output, making the resulting PostScript file portable so that it can be downloaded through interface ports that don't support binary data. Note that the file may be up to 25% larger.
- **Binary:** Image data is output in binary format. Recommended for network printing only (not for the parallel port).

### Printer model

- Displays the currently selected printer.
- Lists all printers supported by PhaserPrint software.
- When you select your printer model, PhaserPrint displays the correct options for your printer.

# Media size (selection)

Paper sizes are printer-specific; refer to the online Help for your printer's options. Before selecting a paper size, select your printer in the **Printer model** field.

### **Color Correction**

- Color Corrections are not available if **Lab** is the selected **Mode** in Photoshop.
- If **RGB** is the selected **Mode** in Photoshop, the **Calibrated RGB** option is also available.

### Media

■ The setting remains in effect until you change it.

### Quality

■ The setting remains in effect until you change it.

### **Rendering Intent**

- Available in the following cases:
  - If the **Mode** in Photoshop is **RGB**, and you select **Calibrated RGB** as the Color Correction in PhaserPrint.
  - If the **Mode** in Photoshop is **Lab**.
- Calibrated RGB and Lab modes take longer to print than other modes because the printer must convert CIE colors to RGB or CMYK colors before printing.

### **Compress Image Data**

- Compresses image data so that less data is sent to the printer or stored in a file.
- Useful if your network connection is slow, for example, if you are connected to a busy network or if you are using a parallel port. For fast networks, printing may be faster without using this option.
- The setting remains in effect until you change it.
- Default is On.

# Fast preview

- Quick print of your image with slightly reduced image quality.
- Reflects the printer color correction you selected.
- For the fastest printing, use the **None** color correction option.
- Default is Off.

### 1st Page Preview

- Available only with the printer's DP or P, and DX Feature Set options.
- When sending a multiple-copy print job to the printer through the driver, you can select **1st Page Preview** to preview the first page of the job, and determine if the job is printing as expected before proceeding with the remainder of the job. This option is especially useful when printing many copies.
  - a. Click the 1st Page Preview check box.
  - **b.** Check your first print. At the **1st Page Preview** message on the printer's front panel, select one of the following:
  - **Reprint:** Reprints the first page, the printer pauses again for the duration of the selected timeout, or until you press one of the buttons.
  - Cancel: Cancels the print job.
  - **Continue:** Continues printing the entire job.
- At the printer's front panel, set the 1st Page Preview timeout.
- Default is Off.

# **Image Smoothing**

- Blends adjacent colors so that color transitions are less noticeable.
- Use this option when the image being printed was scanned at a lower resolution than the printer's output resolution. For example, printing an image scanned at 72 dpi using the printer's Standard print quality mode.
- Images printed using **Image Smoothing** appear with less sharp detail but with smoother color transitions.
- Default is Off.

### Stylized representation of the page

- The lower left area of the dialog box displays a stylized representation of the page as it would look when printed using the current selections in the Scale, Scale to fit, Printer model, Media size (selection), Landscape orientation, Replicate images, Center images, and Image separation options. When you change any of these selections, the representation of the page is redrawn to reflect the new selection.
- If Show color preview of image is On, an approximate color image is displayed.

### Scaling an image

#### Scale to fit

- Scales an image to the largest size that fits the image area of the currently selected page size or orientation.
- Automatically updates the Scale field value.

#### Scale

- Type the percentage the image should be scaled, from 10 percent to 2000 percent.
- Use with the Replicate images option to produce multiple copies of an image on a single page.
- Alert message: **Image clipping will occur.**

This message appears in the PhaserPrint dialog box whenever a scaled image will not fit within the image area of the currently selected page size or orientation option.

### Landscape orientation

- Prints the image horizontally (landscape) on the page. Leave this box unchecked to print the image vertically (portrait) on the page.
- Refer to the **Stylized representation** of the page, in the lower left corner of the dialog box, to see how your selection will look when printed.

### **Center images**

- Centers the image in the page's image area.
- If this box is not checked, the lower left corner of the image is aligned with the lower left corner of the printable area of the page.
- If the **Center images** box is checked and the **Replicate images** box is checked, the set of replicated images are centered in the image area of the page.

### Replicate images

- Fills the page's image area with as many copies of the image as will fit.
- The size of each replicated image is determined by the setting in the **Scale** text box.
- If the size of each replicated image (shown as black rectangles in the stylized representation of the page) is too small to display, the total image area of the printed page is shown as a single gray rectangle.

### **Image size**

- Reflects the dimensions, in inches or millimeters, of the image.
- If the value in the **Scale** box is out-of-range, the image dimensions are displayed with question marks.

### **Image separation**

- Only available if the Replicate images box is checked.
- Type an amount, in inches or millimeters (depending on your measurement standard), to specify the amount of separation between each replicated image.
  - A larger amount reduces the number of images that can be printed at one time.
  - Minimum allowed separation value is 0.
  - Maximum separation value is 100 mm (4 inches).
  - Default separation value is 3.175 mm (0.125/one-eighth inch).
  - Valid characters for this field are 0 to 9 and a period (or decimal point).
  - As you type a value, the stylized representation of the page, and **Number of images** and **Image layout** values are dynamically updated. If the value entered in the Image separation field is out-of-range, the values in these other fields are replaced by question marks, and no images are shown in the stylized representation of the page. If the value is out-of-range, and you click **Print** or **Save**, the following alert is displayed:

The value for Image separation is out of range. It will be replaced with the closest allowed value.

# Number of images

- Displays the number of scaled images that will fit in the image area of the currently selected Media size (selection) and Landscape orientation options.
- **Number of images** reflects the current Image separation value.
- If the **Replicate images** box is not checked, this number is set to **1**.
- If either **Scale** or **Image separation** values are out-of-range, a question mark is displayed.

### Image layout

- Shows how the scaled images will fit horizontally and vertically in the image area of the currently selected Media and Landscape orientation options.
- Image layout reflects the current **Image separation** value.
- If the **Replicate images** box is not checked, this number is set to **1** x **1**.
- If either **Scale** or **Image separation** values are out-of-range, question marks are displayed.

# Media size (display)

Reflects the dimensions, in inches or millimeters, of the selected media size.

### Show color preview of image

Displays an approximate color image, rather than a black box, in the **Stylized** representation of the page field.

# **Printer Utilities**

In addition to using the printer's front panel or the options in a supported driver, the printer's utility files offer another method for changing the way the printer operates. In some cases, a selection can only be made with a utility file.

Utility files control print features such as color correction and enabling or disabling the Startup Page. However, printer features that are selected from a driver override utility file settings and front panel settings.

There are three places to locate utility files:

- The printer's CD-ROM
- Tektronix' ftp site
- Tektronix' World Wide Web site
- Phaser Hard Drive (if internal IDE Hard Disk is installed)

Files can be downloaded to the printer:

- From a Macintosh
- From a PC

# Locating the files on the printer's CD-ROM

# Installing the utility files for Macintosh

### To install the Apple Printer Utility and the Samplers (color charts):

- 1. From the printer's CD-ROM, run the *Installer* application. Select **Easy Install**.
- 2. In the *PhaserTools* folder on your computer's hard disk, locate the *Samplers* (color charts) and the *Apple Printer Utility*.

### To install the printer's utility files:

- On the printer's CD-ROM, locate the PhaserTools folder, then the Printer Utilities folder.
- **2.** Copy the Printer Utilities folder, or individual files, to your computer's hard disk, or use the files from the CD-ROM.

# Installing the files for PC

### Locating the printer's utility files:

- 1. Insert the printer's CD-ROM into the CD-ROM drive.
  - If the Windows autorun feature is enabled, the CD-ROM launches automatically. At the opening screen, click **Exit**.
- 2. In the taskbar on your screen, click **Start**, then **Programs**, then **Windows Explorer**. Select the CD-ROM.
- **3.** Locate the utility files on the CD-ROM in the **phsrxxx** folder inside the **utility** folder (where *phsrxxx* is your printer's name). Use the files on the CD-ROM or copy the files to your computer's hard disk.

#### Installing the Sampler (color charts and font sampler) files:

- 1. Insert the printer's CD-ROM into the CD-ROM drive.
  - If the Windows autorun feature is enabled, the CD-ROM launches automatically.
  - If the Windows autorun feature is disabled, double-click **My Computer**, then double-click the CD icon to launch the CD-ROM.
- 2. For **Setup Type**, select **Custom**.
- **3.** Click **Next** until the **Choose Components and Sub-components** dialog box appears. Make the following selections:
  - Components: Graphics Arts Files
  - Sub-components: Samplers
- **4.** Follow the on-screen instructions to complete the installation.
- **5.** Locate the files in the folder you selected during the installation; the default is: **C:Program Files\Tektronix\Phaser xxx**, where xxx is your printer's name.

# Locating files on the Tektronix World Wide Web site

Tektronix has a site on the World Wide Web that you can reach from a web browser, at the following address:

### www.tek.com/Color Printers/

At the Tektronix Color Printer home page, explore options such as customer support documents and new product information. New and updated information is always being added, so check the web site frequently.

Use a web browser such as Netscape Navigator, and follow these steps.

1. Start your web browser and enter the following address:

### www.tek.com/Color\_Printers/support/software.html

- 2. From the pull-down menus, select your printer, computer, and type of file.
- **3.** Select the files you need; they are downloaded to your computer.

# Locating files on the Tektronix FTP server

Utility files included on the printer's CD-ROM let you set up the printer from UNIX and VMS workstations to select between media trays, print quality modes, color correction modes and other features. If you don't have the means to transfer these files from the CD-ROM, you can request files from the Tektronix anonymous ftp server.

If you can exchange electronic mail with other Internet sites, you can access the Tektronix ftp server. From this server you can retrieve driver and utility files and color printer information either with a web browser or command prompt.

#### From a web browser:

- 1. Start your web browser application.
- **2.** Type this address:

### ftp://ftp.tek.com/

- **3.** From the pull-down menus, select your printer, computer, and type of file.
- **4.** Select the files you need; they are downloaded to your computer.

#### From the command line:

- **1.** At the system prompt, type the following: **ftp ftp.tek.com** The system responds: Name (ftp.tek.com:<login name>):
- Type: anonymous. Press Return.
   The system responds: Guest login ok, send your complete e-mail address as password.
- 3. Enter your e-mail address. Press Return.
- **4.** Change directories to your printer-specific directory: **cd Color Printers/UNIX/Phaser 850/utilities**
- 5. Download the utility files; type: **mget** \*
  The system prompts you for each file in the directory, to which you respond **y** (yes) or **n** (no).
- **6.** Exit the ftp session: type **quit** or **bye**; press **Return**.

# Downloading files to the printer from a Macintosh

# Using the Apple Printer Utility to download files

All PostScript utility files on the printer's CD-ROM can be downloaded to the printer with the Apple Printer Utility.



To download PostScript utility files, follow this procedure:

- **1.** From the *PhaserTools* folder on your computer's hard disk, double-click *Apple Printer Utility*.
- **2.** In the **Printer Selector** dialog box, make the following selections:
  - Under **AppleTalk Zones**, select your printer's zone.
  - Under **Printers**, select your Phaser printer.
  - Click Open Printer.
- **3.** From the **File** menu, select **Send PostScript File**; the **Select the PostScript files to download** dialog box appears.
- **4.** Select the folder location of the PostScript file(s) that you want to download. The printer's PostScript utility files are located on the CD-ROM in the Printer Utilities folder inside the Phaser Tools folder.
- 5. Select a utility file. Click Add.
- 6. Click Send.
- 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 a new name. (Printer output includes status messages generated by the printer reporting such conditions as out of paper.)
- **8.** Click **Save**.
- **9.** If no output is returned by the printer, the Apple Printer Utility displays a dialog box; click **Continue.** If output is returned by the printer, you won't see this dialog box.
  - Check your computer's hard disk for the message file created by the utility.

To download fonts, see page 73 for additional information.

To print a font sampler, see page 74 for additional information.

To download color sampler charts, see page 106 for additional information.

# Using the Apple Printer Utility to perform other tasks

In addition to downloading PostScript files and fonts, you can use the Apple Printer Utility to perform the following specialized tasks.

#### **Note**

If your printer is connected through a print server, you can only use the Apple Printer Utility to download PostScript utility files.

### Turning on/off the Startup Page

- 1. Double-click Apple Printer Utility.
- **2.** In the **Printer Selector** dialog box, make the following selections:
  - Under **AppleTalk Zones**, select your printer's zone.
  - Under Printers, select your Phaser printer.
  - Click Open Printer.
- **3.** Click the arrow next to **Printer Preferences**; a list of options appears.
- **4.** Click the arrow next to **Startup Page.**
- **5.** Click one of the following:
  - On: Prints a Startup Page each time the printer is turned on or reset.
  - Off: Stops the Startup Page from automatically printing.
- 6. Click Send.

### Changing the printer's AppleTalk name

- 1. Double-click **Apple Printer Utility**.
- **2.** In the **Printer Selector** dialog box, make the following selections:
  - Under **AppleTalk Zones**, select your printer's zone.
  - Under Printers, select your Phaser printer.
  - Click Open Printer.
- **3.** Click the arrow next to **Printer Preferences**; a list of options appears.
- 4. Click the arrow next to Name.
- **5.** In the text box, type the new printer name.
- 6. Click Send.

# Downloading files to the printer from a PC

# Downloading files from Windows 3.1

- **1.** Select the utility file you want to send to the printer, for example *RESET.PS*.
- 2. From the **File** menu, select **Copy**; the **Copy** dialog box appears with the utility file you selected listed in the **From** field.
- **3.** In the **To** field, type the port your printer is connected to. For example, type **LPT1:** for a parallel port connection. Click **OK.**
- **4.** If the **Confirm File Replace** dialog box appears, click **Yes** to continue; the file is downloaded to the printer.

# Downloading files from Windows 95 / Windows 98

- 1. Select the utility file you want to send to the printer, for example *RESET.PS*.
- 2. In the taskbar on your screen, click Start, then Programs, then MS-DOS Prompt.
  - Change directory to the location of the utility files.
  - 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**:

# **Downloading files from Windows NT**

- **1.** Select the utility file you want to send to the printer, for example *RESET.PS*.
- 2. In the taskbar on your screen, click Start, then Programs, then MS-DOS Prompt.
  - Change directory to the location of the utility files.
  - If your printer is connected to a network, type the following command: lpr -S <IP Address> -P PS RESET.PS

# Downloading files if your printer is connected to a Novell Netware network

This procedure lets you redirect (capture) LPT ports in Novell NetWare. NetWare queues can be captured from the DOS Prompt or captured directly from Windows. To find out if an LPT port is already captured, type the following command from the DOS Prompt: capture show

This will list the current capture data for each virtual port.

#### **Note**

If an **ad** command or file name error occurs, run the command from the file servers Public directory.

■ For NetWare 3.xx and Netware 4.xx bindery queues:

### capture q=[queue\_name] l=[port] nb nff nt

where *queue\_name* is the name of the queue to be captured, and *port* is the virtual port to capture to, such as LPT3.

Also, *nb* is no banners, *nff* is no form feeds, and *nt* is no tabs.

For example: capture q=phaser\_350 l=3 nb nff nt

#### Note

For NetWare 4.xx NDS queues, the queue name needs to start with a period. For example: **capture q=.phaser\_350\_q.nds.printers.support l=2 nb nff nt.** 

- For Windows 95 / 98 environments follow these guidelines:
- 1. From the Details tab of your printer's driver, select the Capture Printer Port button.
- **2.** Select the appropriate virtual port under the Device field.
  - For bindery queues, enter the path as \\server\_name\queue\_name and select OK. For example: \\nw\_server\Phaser\_350
  - For NDS queues, enter the path as \\Tree\queue\_name.context and select OK. For example: \\Tek\.Phaser\_350\_Q.nds.printers
- For Windows 3.1x environments follow these guidelines:
- 1. From the Windows Control Panel, select Printers.
- **2.** Select the Connect button, then select the Network button.
- **3.** Choose a Port to capture, then locate the appropriate queue.

#### **Note**

If the appropriate file server is not listed, click the Attach button and select the desired file server. Login and click OK. Within the Operation section, check the box next to the word Permanent, then click Connect. The port should then be captured.

# Downloading files if your printer is connected through PhaserPort

This procedure lets you create the printer and then redirect the port, turning client #1 into a print server.

- 1. On Client #1, create a printer using the LPT1 port.
- **2.** Share the printer to the network.
- 3. Install Phaserport and switch the LPT1 port to the Phaserport port.
- **4.** On client #2, browse the network and install the shared printer.
- **5.** Open the printer's Properties.
  - **a.** Click Start, select Settings, and then select Printers.
  - **b.** Right-mouse-click on the printer's icon.
  - **c.** In the pop-up dialog box, select Properties.
  - **d.** In the Details tab, click Capture Port and enter the path.

# Downloading files if your printer is connected to Windows NT

This procedure lets you redirect (capture) LPT Ports

Under Windows NT print spooler, you create Ports based on their physical location:

- Local ports = Lpt1 / Lpt2, etc.
- IPX Port = \\NW\_SERVER\Phaser
- Appletalk Ports = WV Net 36:Phaser
- TCP/IP Ports = 162.36.62.151:PS or [AUTO]

However, if you're at a command prompt (DOS Prompt) and want to print, or copy, a PostScript file to a port that is a network port, you can do the following:

■ TCP/IP Ports:

### lpr -S [printers IP Address] -P [print queue] filename

For xxample: lpr -S 134.62.36.70 -P PS test.ps

■ IPX and Appletalk ports require the redefinition of the LPTX port to the network path through the use of the NET USE command.

#### NET USE LPT1 \\Server Name\Queue Name

For example: NET USE LPT1 \\NW SERVER\Phaser

or: NET USE LPT2 \\NT\_SERVER\_NT\Phaser

After redirecting the port using the NET USE command you can use the COPY command to print the postscript file.

eg. C:\> COPY TEST.PS LPT1:

When finished, end the redirect with the command:

NET USE LPT1 /delete

# Advanced Printing Features for Phaser 850 Printers

# Previewing with 1st Page Preview

When printing multiple pages through the driver (either multiple copies of a single page or a multiple-page file), select **1st Page Preview** to preview the first page of the job before proceeding with the remainder of the job; this feature is useful when printing a large job.

You can set the timeout in the printer's front panel (timeout is the amount of time the printer waits after sending the first page of a file before it continues with the remainder of the job). The default timeout is 5 minutes.

### Requirements

- DP or DX Feature Set
- Turn on the feature in the printer driver

### **Use 1st Page Preview**

- **1.** In a supported driver, select **1st Page Preview**:
  - LaserWriter 8.3.4 driver:
    In the Print dialog box, click Options.
  - LaserWriter 8.5.1 driver:

    In the Print dialog box, from the pull-down menu (General) select Printer Specific Options.
  - Windows 95 / Windows 98 PostScript driver: Start/Settings/Printers, then select Properties for your printer. In the Setup tab, select Expert Options.
  - Windows 2000 driver:
    From the Layout tab or Paper/Quality tab, click Advanced.
  - Windows NT driver:
    Under the Properties tab, select the Advanced tab. In the Document Options tab,
  - Adobe PS3 driver for Windows 3.1: Select the Features tab options.

select Printer features.

- 2. Check your first print. At the printer's front panel 1st Page Preview message, choose one of these options:
  - **Reprint**: Reprints the first page, pauses for the duration of timeout or until you press a button.
  - Cancel: Cancels the print job.
  - **Continue**: Prints the rest of the print job.
- Press Select.

### Reset the timeout

- 1. In the front panel, scroll to Menu; press Select.
- 2. Scroll to Printer Configuration; press Select.
- 3. Scroll to **Default Printer Settings**; press **Select**.
- 4. Scroll to 1st Page Preview Timeout; press Select.
- **5.** To change the timeout (the amount of time the printer pauses before completing the print job), press the up or down arrows; press **Select**.
- **6.** To exit, scroll to **Exit** and press **Select**.

#### **Note**

You can also control the default timeout for **1st Page Preview** through PhaserLink Printer Management software. For details on PhaserLink Printer Management software, refer to the *PhaserShare Networking Manual* on the printer's CD-ROM or Tektronix web site.

# Automatic tray switching

When your printer has a High-Capacity Paper Tray Assembly, you can easily run large jobs without having to replace paper often. The printer automatically takes paper from the next tray when the first tray runs out.

- 1. For automatic tray switching to work properly, load the same type and size paper in all of the printer's paper trays.
- **2.** Install a tray in each of the printer's tray slots.
- **3.** In the printer driver, select **Paper** as the source.

# **Front Panel Intensity**

You can adjust the intensity of the front panel's back lighting.

- 1. In the printer's front panel, scroll to Menu; press Select.
- **2.** Scroll to **Printer Configuration**; press **Select**.
- 3. Scroll to Default Printer Settings; press Select.
- 4. Scroll to **Set Front Panel Intensity**; press **Select**.
- **5.** To change the front panel back light intensity (0 is no back light, 10 is the brightest back light), press the up or down arrows.
- 6. To activate your selection, press Select.
- 7. To return to the **Ready to Print** message, scroll to **Exit**; press **Select**.

# Intelligent Ready mode

Intelligent Ready mode is an automated system that monitors the printer's usage and warms up the printer when you are most likely to need it. You can set Intelligent Ready mode with PhaserLink or the printer's front panel. The front panel only allows you to turn Intelligent Ready mode On or Off; use PhaserLink to make other settings.

- 1. In the printer's front panel, scroll to **Menu**; press **Select.**
- 2. Scroll to **Printer Configuration**; press **Select**.
- 3. Scroll to **Default Printer Settings**; press **Select.**
- 4. Scroll to **Advanced Printer Settings**; press **Select**.
- 5. Scroll to Intelligent Ready.
- 6. Press **Select** to turn this option **On** or **Off**.
- 7. To return to the **Ready to Print** message, scroll to **Exit**; press **Select**.

#### **Note**

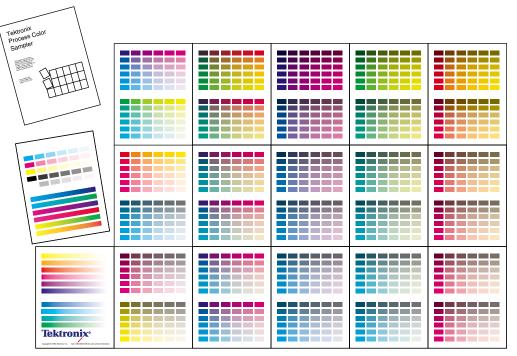
You can also turn on the Intelligent Ready mode and set your own printer warm-up times through PhaserLink Printer Management software. For details on PhaserLink Printer Management software, refer to the *PhaserShare Networking Manual* on the printer's CD-ROM or Tektronix web site.

# Color Sampler Charts for Phaser 850 Printers

# **Overview**

Color sampler charts are colored rectangles with each color's component values; they help you select colors in an application that can be reproduced on your printer.

Component values are percentages of each color — CMYK (Cyan, Magenta, Yellow, Black), RGB (Red, Green, Blue), or HSB (Hue, Saturation, Brightness) — that combine to make a particular color.



9103-64

# **Color charts**

- Which color chart you print and use depends on how your application selects color. For information on color selection, refer to the application's documentation, then print one or more of the color sampler charts.
- Each color sampler chart is several pages long; print them in panels and connect them to form a wall chart or place in a binder for easy reference.

### Color sampler chart descriptions

Color sampler cl	hart	Number of pages *	Utility file	Front panel selection	PhaserLink
CMYK Sampler	Cyan, magenta, yellow, and black color model	18	X	X	X
RGB Sampler	Red, green, and blue color model	12	X	X	X
HSB Sampler	Hue, saturation, and brightness color model	12	X		

<sup>\*</sup> The number of pages will be half with two-sided printing.

#### Note

To print the PANTONE Color sampler chart, refer to *Printing the PANTONE Color Chart* on page 80.

# Printing a color sampler chart from the Phaser 850 printer's front panel

#### Note

Use the same color correction and print quality mode to print the chart and to print from your application. Any other color correction or print quality mode selections in the driver will cause colors to print differently than expected.

### Selecting a color correction and a print quality mode

- 1. From the printer's front panel, use the up and down arrows to scroll to **Menu**; press **Select**.
- **2.** Scroll to **Printer Configuration**; press **Select**.
- 3. Scroll to Default Printer Settings; press Select.
- **4.** Scroll to **TekColor Correction**; press **Select**.
- **5.** Scroll to the color correction you want; press **Select**. A checkmark appears next to your selection.
- 6. Scroll to Previous Menu; press Select.
- 7. Scroll to Print Quality Mode; press Select.
- **8.** Scroll to the print quality mode you want; press **Select**. A checkmark appears next to your selection.
- 9. To return to the **Ready to Print** message, scroll to **Exit**; press **Select**.

### Printing a color sampler chart

- 1. From the printer's front panel, scroll to **Printer Demo** and press **Select**.
- **2.** Scroll to the desired color sampler, then press **Select**. The color sampler prints.
- 3. To return to the **Ready to Print** message, scroll to **Exit**; press **Select**.

# Printing the desired colors from an application

- 1. Using the color sampler chart that you printed earlier, select the desired colors.
- **2.** From your application, apply the desired colors in your document by entering the specific CMYK or RGB values as indicated on the sampler chart.
- 3. Print your document; select the same color correction and print quality mode that you used to print the color sampler chart.

# Printing the color sampler charts with utility files

### From a Macintosh

- 1. Refer to *Downloading files to the printer from a Macintosh* on page 95 to install and use the *Apple Printer Utility*. The color sampler charts are also installed during Easy Install.
- **2.** Within the *Apple Printer Utility*, locate the color sampler chart files in the *PhaserTools* folder on your computer's hard disk and download them to the printer to print.

### From a PC or workstation

- 1. Insert the printer's CD-ROM into the CD-ROM drive.
  - If the Windows autorun feature is enabled, the CD-ROM launches automatically.
  - If the Windows autorun feature is disabled, double-click **My Computer**, then double-click the CD icon to launch the CD-ROM.
- **2.** For **Setup Type**, select **Custom**.
- **3.** Click **Next** until the **Chose Components and Sub-components** dialog box appears. Make the following selections:
  - Components: **Graphics Arts Files**
  - Sub-components: Samplers
- **4.** Follow the on-screen instructions to complete the installation.
- **5.** Locate the files in the folder you selected during the installation; the default is: **C:Program Files\Tektronix\Phaser xxx**, where xxx is your printer's name.
- **6.** Refer to *Downloading files to the printer from a PC* on page 97 for file downloading instructions.

# **Troubleshooting Phaser 850 Printers**

# **Useful tools**

### **Printer CD-ROM**

- Advanced Features and Troubleshooting Manual
- Consumables instructions
- Setup Guide poster
- Video help
- Networking manuals
- Cleaning instructions
- Repacking instructions
- Printer drivers
- Material Safety Data Sheets (MSDS)

# Windows driver help system

Install the driver from the printer's CD-ROM and use the embedded help system.

- Troubleshooting information
- Access to installed manuals and videos
- Live links to the Tektronix web site

### **Color Connection**

#### colorconnection.tektronix.com

Color resource for tools and information to help you get the most out of your color printer:

- Customized support and automatic driver update notification.
- Color education with interactive tutorials and helpful hints.
- Free templates and promotions.
- Online supplies ordering
- Online documentation.

# Printer's front panel

- **Help** menu: Accesses information and tools for solving printer problems.
- **Help** button: Press at any time for additional information on displayed menu options or status messages.
- **Troubleshoot Jams** menu: Appears when paper jams, provides additional information.

### Internal printer pages

The printer has several help pages available; refer to the Menu Map for their locations.

- Connection Setup: connecting to a computer or network
- Diagnostic Test Page: how to solve print problems, such as smudges or light stripes
- **Help Guide:** Provides specific help resources.
- Paper Tips Page: what papers, transparencies, or labels to use
- Supplies Page: part numbers and descriptions

### PhaserLink™ Software

### www.tek.com/Color\_Printers/products/phaserlink.html

- View printer status using any web browser
- Control printer settings
- Link to online documentation via the World Wide Web
- Receive electronic mail when consumables are low or other printer maintenance is required
- Requires network connection via TCP/IP

### Tektronix web site

### www.tek.com/Color\_Printers/

- Product and supplies information
- Finding your local reseller

# TekSMART™ Knowledge Base

#### www2.tek.com/TekSMART/

- Application issues
- Networking issues
- Printer errors
- Print quality issues
- Troubleshooting
- Latest tips from technical support

### Other online services

Anonymous ftp server	ftp.tek.com/Color_Printers/	
Subscribe to email update notices	www.colorconnection.tektronix.com	

### Front panel messages

### Power indicator is blinking

Possible Causes	Solution
The printer is receiving, processing or printing a job.	Wait for the job to be completed or cancel the job.
You have entered the menu in the front panel.	Exit the menu.
Warm-up sequence has not finished.	Wait until the printer displays Ready to Print.

### Power indicator is off

Possible Causes	Solution
The printer is turned off, is not ready, is disabled, or has detected an error.	<ul> <li>Make sure that the printer is plugged in and turned on.</li> </ul>
	<ul> <li>Do not plug the printer's power cord into a power strip; use a wall outlet.</li> </ul>

### Error indicator is blinking

Possible Causes	Solution
The printer is stopped because it detected an error or condition requiring user intervention, such as an open door or a media jam.	<ul> <li>Correct the condition reported by the front panel (for example, close the door or clear the media jam).</li> </ul>
	<ul> <li>Press the Help button to access information on the error condition.</li> </ul>
	<ul> <li>Turn the printer off and unplug the power cord for 1 minute. Then plug in the power cord and turn on the printer.</li> </ul>
	<ul> <li>If the problem is an error that is not user-correctable, contact Customer Support.</li> </ul>

### Returns to Ready to Print without any intervention

Possible Causes	Solution
Front-panel timeout: If no activity occurs in 2 minutes, the front panel returns to <b>Ready to Print.</b>	Scroll to <b>Menu</b> and press <b>Select</b> to re-enter the menu.

### Media Jam messages

Possible Causes	Solution
Media jam.	• Make sure that paper or transparencies are installed correctly and that the tray's media indicator switch has been set correctly.
	When using the manual feed slot, make sure that the media is fed straight and aligned with the left edge of the manual feed slot.
	<ul> <li>To clear the jam: Refer to the printer's front panel Troubleshoot Jams menu for instructions.</li> </ul>
Too much media is loaded in the media tray.	Reduce the amount of media to below the tray's maximum-capacity label.
Media is wrinkled or curled.	Change the media.
Media is too thick or too thin.	Use recommended media; refer to the printer's user guide, or print the Paper Tips Page (see the Menu Map for location.)
Media has jammed at the manual feed slot because it was not loaded properly.	Re-insert the media in the manual feed slot:
	<ul> <li>Make sure the sheet is loaded flush against the left side of the manual feed slot.</li> </ul>
	<ul><li>Feed only one sheet at a time.</li></ul>
	• Insert the sheet until it is pulled into the printer.

### Media Jam - Retry manual feed

Possible Causes	Solution
An envelope has jammed because it was not	Re-insert the envelope in the manual feed slot:
loaded properly.	Make sure the envelope is loaded flush against the left side of the manual feed slot with the flap side facing up. Refer to the diagram on the manual feed slot for instructions.
	When prompted by the front panel, feed one envelope only.
A sheet of paper has jammed because it was not loaded properly.	Re-insert the sheet in the manual feed slot:
	Make sure the sheet is loaded flush against the left side of the manual feed slot. Refer to the diagram on the manual feed slot for instructions.
	When prompted by the front panel, feed one sheet only.

### Output tray full

Possible Causes	Solution
Too much media is stacked in the output tray.	Remove all printed pages from the output tray.

### **Incorrect Media Size**

Possible Causes	Solution
An incorrect paper size is loaded in the tray, or paper narrower than the driver selection is in the manual feed slot.	<ul> <li>Use only supported paper, transparency, and envelope sizes.</li> <li>Make sure the size matches the driver selection.</li> </ul>

### Ink low - Add ink

Possible Causes	Solution
One or more colors of ink are almost empty.	Add ink soon.

### Out of ink

Possible Causes	Solution
One or more colors of ink are empty.	Add ink to continue printing.

### Ink sticks jammed

Possible Causes	Solution
One or more ink sticks are stuck in the ink-loading bin.	<ul><li>Open and close the top cover.</li></ul>
	<ul> <li>Press each row of ink sticks in the ink-loading bin to make sure they are not jammed.</li> </ul>
	<ul><li>Do not use broken ink sticks.</li></ul>
	<ul> <li>Install ink sticks with the tapered side down.</li> </ul>

### Maintenance Kit Low

Possible Causes	Solution
The Maintenance Kit is almost empty.	Order a replacement Maintenance Kit.

### Maintenance Kit Empty

Possible Causes	Solution
The Maintenance Kit is depleted.	<ul> <li>Replace the Maintenance Kit to continue printing.</li> <li>If message remains after new kit is installed, make sure the new counter is also installed.</li> </ul>

### Maintenance Drawer (A) locked

Possible Causes	Solution
Hot ink is present.	Close the door and wait a few minutes before removing the maintenance drawer (A) from the printer.

### Maintenance Drawer (A) Missing

Possible Causes	Solution
Maintenance counter is not installed.	Install the counter.
Maintenance Drawer is not installed.	Install the Maintenance Drawer.

### Maintenance Kit Service Life Low

Possible Causes	Solution
The 2-year service life is soon to expire.	Replace Maintenance Kit soon.

### Maintenance Kit Service Life Expired

Possible Causes	Solution
The 2-year service life has expired.	Replace Maintenance Kit now.

### Printer Error ##

Possible Causes	Solution
An error occurred that may not be user-correctable.	Turn the printer off and unplug the power cord for 1 minute. Then plug in the power cord and turn the printer back on.
	If the error is not cleared, write down the error number.
	If you have access to the World Wide Web, look up the error number on the TekSMART web page (see <i>Useful tools</i> on page 107) for possible corrective action.
	<ul> <li>If the error persists, call Customer Support with the error number. See the printer's user guide for instructions.</li> </ul>

### Problems with automatic two-sided printing

### Output is single-sided

- Make sure that you have selected two-sided printing in the printer driver.
- Use Letter- or A4-size paper only.
- Make sure the switch on the standard Paper/Transparency tray is set to **Paper**.

#### Frequent jams with two-sided printing

- Paper must be between  $60 150 \text{ g/m}^2$  (16 40 lb. bond) in weight. For better performance, use papers within the 16 32 lb. range.
- When using the manual feed slot, make sure that the media is always loaded straight.

#### Second side of a two-sided print is upside-down

- Select the correct method for binding preference in the printer driver.
  - **Long-edge binding**: Page turns on the long side, regardless of image orientation.
  - **Short-edge binding**: Page turns on the short side, regardless of image orientation.
- Refer to the printer's user guide for detailed instructions.

### Letterhead paper prints on the wrong side or prints upside-down

- Manual feed: Load letterhead paper *face up* with the top of the page entering the printer first.
- Tray: Load letterhead paper *face down* with the top of the page at the front end of the tray.

### Problems printing on labels

### Labels are printed on the wrong side

- Make sure the labels are loaded *face up* in a tray, or *face down* in manual feed slot.
- Make sure that two-sided printing is **not** selected in the printer driver; two-sided printing is not supported for labels.

### **Printing labels from Microsoft Word**

- 1. From the Tools menu, select Envelopes and Labels.
- 2. In the Envelopes and Labels dialog box, click the Labels tab.
- **3.** In the labels dialog, click on the labels Option icon.
- **4.** In the Options field, select all of the following depending on label size:

#### Letter-size:

- a. Printer: Laser and Ink-jet
- b. Label Products: Avery Standard
- **c.** Select the label size corresponding to Tektronix label media:

Avery label sizes	Tektronix label media		
5160	A/Letter (U. S.) 8.5 x 11 in.	100 sheets / 30 labels per sheet (each 1 x 2-5/8 in.)	016-1812-00
5164	A/Letter (U. S.) 8.5 x 11 in.	100 sheets / 6 labels per sheet (each 3-1/3 x 4 in.)	016-1813-00

#### Metric-size:

- a. Printer: Laser and Ink-jet
- b. Label Products: Avery A4 and A5 sizes
- **c.** Select the label size corresponding to Tektronix label media:

Avery label sizes	Tektronix label medi	ia	
L7163	A4 (Metric Letter) 210 x 297 mm	100 sheets / 14 labels per sheet (each 38.1 x 99.1 mm)	016-1814-00
L7165	A4 (Metric Letter) 210 x 297 mm	100 sheets / 8 labels per sheet (each 67.1 x 99.1 mm)	016-1815-00

**5. For a Macintosh**: Click Print. In the Print dialog box's **General** options, for **Paper Source** select **Manual Feed Paper**.

For a PC: In the Printing Options tab, for Feed From, select Manual Feed Paper.

6. Click Print.

### **Print Quality Problems**

### Light-colored or missing stripes on prints

Clean the printhead: in the front panel troubleshooting menu, select **Eliminate Light Stripes**. Refer to *page 123* for more information.

#### Ink streaks or oil on front, back, or edges of print

- Clean the printer's internal paper path with the front panel troubleshooting routine. Refer to *Cleaning for ink smears: paper-exit path* on page 133.
- Clean the printer's paper-exit rollers. Refer to *Cleaning for ink smears: paper-exit path* on page 133.
- Clean the wiper blade in the Maintenance Drawer (A); refer to *Cleaning for oily streaks* on page 126 for instructions.
- Clean the printer's Rapid Release Guide; refer to *Cleaning for ink smears: paper-exit* path on page 133 for instructions.

#### Prints have dull, faded colors

- If you are using the upper media tray, make sure that the indicator switch has been set for the appropriate media.
- Use only Phaser 850 printer transparencies; they have been specially formulated for this printer.
- For printing on transparencies, make sure that you have selected in the driver **Transparency** (for the media tray) or **Manual Feed Transparency** (for the manual feed slot).
- Try a different color correction mode or increase the print quality mode. Refer to the printer's user guide for more information.

#### Photographic images appear grainy

- In the printer driver, select the highest print quality mode.
- Use images that are 150 dpi or higher.

#### Black-and-white prints instead of color

In the printer driver, check if the TekColor Correction is set to **Black and White**; if it is, choose a different color correction.

#### Macintosh users:

- Make sure that you are using the correct PPD file with the latest Apple LaserWriter printer driver (version 8.3.4 or higher), that supports color PostScript.
- In the **Print** dialog box, make sure that **Color/Grayscale** is selected. Some applications require special files to print in color. Make sure that these files are properly installed. For information, refer to the topics on the printer's CD-ROM or the Tektronix World Wide Web site.

#### Black-and-white prints instead of color, cont.

- PC users:
  - Be sure to use the printer driver on the printer's CD-ROM.
  - Make sure the application you are using is set up to print in color.

#### Blue colors look too purple

If printed blue colors look too purple, print your document with the **Vivid Color** color correction. Refer to the printer's user guide for information on color corrections.

### Transparency print quality poor.

- Use only Phaser 850 printer transparency media.
- Make sure that you have selected **Standard** as the print-quality mode; try setting **Vivid Color** as the color correction.
- Make sure that the switch on the side of the Standard Paper/Transparency Tray, or on the High-Capacity Transparency/Label Tray, is set to **Transparency**.
- Make sure that you have selected in a supported printer driver either Transparency for the media tray or Manual Feed Transparency (for the manual feed slot).

### Print is wrinkled or rippled

- If your paper is smooth, glossy, or coated, try a different type of paper. Use only supported paper types.
- Use single-sided printing instead of double-sided printing.

### **Printing problems**

### The printer times out when connected to a parallel port

Windows users: To change the timeout for transmission retry, refer to the Microsoft Online Help for instructions.

### Part of the image is missing or image is clipped

- For more details on page sizes, print areas, and margins, refer to User Guide.

  To maximize the image area, you may have to adjust the margins in your application software.
- In your application, check the setting for **Image Size**.
- Make sure you have selected the correct paper size in the printer driver.
- Make sure you have selected Page Setup after changing printers.

### You have problems printing from a specific application

■ Get information and tips on printing from specific applications (such as QuarkXPress and PageMaker) from the Tektronix Color Printer web site.

### Fonts print incorrectly in Windows

- If you have downloaded fonts to your printer, or stored additional fonts on the internal hard drive, you may need to reinstall the fonts.
- If you are using PostScript fonts, make sure ATM (Adobe Type Manager) is installed and configured properly. ATM software is shipped with your printer.

#### **Text prints in Courier font**

The font you have specified is not available. The printer has 136 resident fonts. Other fonts must be set up from the printer driver to print with each job.

### Preventing media jams

Use the following guidelines to prevent media jams inside the printer.

- Make sure the printer is on a flat, level surface.
- Do not overfill the media tray, as indicated by the tray's maximum-capacity label.
- Media:
  - Use only the recommended media. Refer to the printer's user guide, or print the Paper Tips Page from the printer's front panel. See *Internal printer pages* on page 108 for more information.
  - Make sure you use a high-quality paper: 60 150 g/m<sup>2</sup> (16 40 lb. bond) paper in the media trays. Refer to the printer's user guide for more information.
  - Use only Phaser 850 printer transparencies; they have been specially formulated for this printer.
  - Keep paper and other supplies clean and free from dust.
  - Paper that has been sitting out of its sealed wrapper can become distorted, causing paper jams. Keep paper sealed until you are ready to use it for printing.
  - Do not use paper that has been creased or wrinkled.
  - Do not print on sheets of labels that are missing labels.
  - Use only Phaser 850 printer labels.
  - Do not use perforated paper, or odd-sized paper.
  - For three-holed paper, make sure margins are adjusted to avoid printing over the holes.
- When using the manual feed slot:
  - Always use two hands to load the media straight and evenly.
  - Wait until a front panel message prompts you before feeding a second sheet of paper or transparency.
- Clean the printer's rollers if they are visibly dirty. Refer to *page 122* for more information.
- In high-humidity conditions, or when using speciality papers that can be printed on both sides: Remove the paper from the paper tray, turn over the stack of paper, and reinsert the paper into the tray.
- At the printer's front panel:
  - **a.** Scroll to **Help**, press **Select**.
  - **b.** Scroll to **Jams**, press **Select**.
  - **c.** Scroll to **Preventing Media Jams**, press **Select**.
  - **d.** Review the Paper Tips Page.

After you clear a media jam, the printer automatically outputs a second, usually partial print to remove any image that may remain on the print drum; then the printer prints your original image.

The lower tray is the default tray for paper that the printer uses in self-cleaning. If you have one or two High-Capacity Paper Tray Assemblies, you can make the upper or middle tray the default tray through the printer's front panel menu. Refer to *Selecting the source for cleaning pages* on page 122 for instructions.

### Turning the Startup Page on or off

By default, the printer produces a Startup Page each time the printer is turned on or reset. If desired, you can disable the Startup Page. There are three methods for turning on/turning off the Startup Page:

### From the printer's front panel

- 1. Scroll to Menu; press Select.
- 2. Scroll to **Printer Configuration**; press **Select**.
- 3. Scroll to **Default Printer Settings**; press **Select**.
- **4.** Scroll to **Startup Page**; press **Select** to toggle the setting.
- **5.** Scroll to **Exit**; press **Select**.

### From PhaserLink Printer Management software

Refer to the *PhaserShare Networking Manual* for information on using your World Wide Web browser to access the printer via a TCP/IP network connection.

### From utility files

Download one of the following files from the printer's CD-ROM:

- **Macintosh:** Use the Apple Printer Utility (refer to *page 95* for instructions).
- **PC:** Use utility files *STARTPG.PS* (to turn on the Startup Page), *NOSTRTPG.PS* (to turn off the Startup Page); refer to *page 91* for downloading instructions.

### Protected mode for the front panel menu

System administrators can control user access to the front panel menus with PhaserLink Software or the following utility files (refer to page 91 for instructions on downloading utility files):

### Macintosh utility files

- Menu Short (limits menu access)
- *Menu Long* (expands menus)

### PC utility files

- *MENUSHRT.PS* (limits menu access)
- *MENULONG.PS* (expands menus)

The "short" utility files limit the menu items displayed on the front panel, preventing users from changing front panel settings that may affect the prints of other users. Users instead select printing features — such as color corrections — through their applications only. In the protected mode, users can access all menus except the **Default Printer Settings**, **Advanced Printer Settings**, and **Network Settings**.

The "long" utility files reset the front panel to display full menus and allow full access to the settings.

If you used the *Menu Short* or *MENUSHRT.PS* files to limit the front panel menus, you can temporarily restore the full menus:

- 1. When the **Ready to Print** message appears, scroll to **Menu**; press **Select**.
- **2.** Scroll to **Printer Configuration**; press **Select**.
- 3. Hold down the left arrow and press Select. The Default Printer Settings and Network Settings selections are added to the menu and are removed again when the Printer Configuration menu is closed.

### Turning Sys/Start Job execution on or off

You may load a startup (*Sys/Start*) file onto the printer's internal hard disk, if installed. The *Sys/Start* job file is similar to an *init* file: When you turn on the printer, the file executes — providing that Sys/Start has been turned on either through a front panel setting or with a control file downloaded to the printer.

If the *Sys/Start* file contains an error, the printer ignores the remainder of the file and may not start up as expected.

### Using the front panel

- 1. When the **Ready to Print** message is displayed, use the down arrow to scroll to **Menu**; press the **Select** button.
- 2. Scroll to **Printer Configuration**; press **Select**.
- 3. Scroll to **Default Printer Settings**; press **Select**.
- **4.** Scroll to **Advanced Printer Settings**; press **Select**.
- **5.** Scroll to **Sys/Start Job**. Press **Select** to change the setting to **On**.
- **6.** To save the new setting, scroll to **Exit**; press **Select**. The **Ready to Print** message appears.
- **7.** To make the change take affect, turn the printer off and back on again.

### Using utility files

Refer to *page 91* for instructions on downloading utility files. To make the change take affect, turn the printer off and back on again.

### Macintosh utility files

- Set SysStart Job (Turns on automatic execution of the SysStart job.)
- *No SysStart Job* (Turns off automatic execution of the SysStart job.)

### PC utility files

- *SYSTART.PS* (Turns on automatic execution of the SysStart job.)
- *NOSYSTRT.PS* (Turns off automatic execution of the SysStart job.)

### **Cleaning Phaser 850 Printers**

You need to clean the printer when prints are striped or smeared. How often you need to clean the printer will depend on how heavily the printer is used and the environment in which it is used.

### Selecting the source for cleaning pages

The lower tray is the default source for the cleaning pages that the printer uses in its cleaning procedures. When one or two High-Capacity Paper Tray Assemblies are installed, you can ensure that the printer always uses paper from the lower or middle paper tray in its self-cleaning procedures by changing a setting in the printer's front panel:

- 1. When the **Ready to Print** message is displayed, scroll to **Menu** and press **Select**.
- **2.** Scroll to **Printer Configuration**; press **Select**.
- **3.** Scroll to **Default Printer Settings**; press **Select**.
- **4.** Scroll to **Advanced Printer Settings**; press **Select**.
- **5.** Scroll to **Cleaning Page Source**; press **Select** and choose the desired tray.
- **6.** To return the printer to the **Ready to Print** message, scroll to **Exit**; press **Select**.

You can also change the default through PhaserLink Printer Management software if your printer is connected to a network via TCP/IP. Simply enter your printer's IP address in a standard web browser. Refer to the *PhaserShare Networking Manual* or details.

### **Cleaning supplies**

Optional cleaning kits contain presoaked alcohol wipes; order number: 016-1845-00.

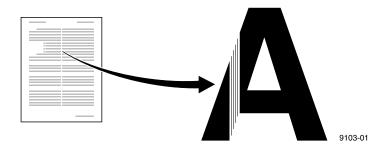
If you purchase isopropyl alcohol, always use alcohol that is at least 90% pure; alcohol that has additives can damage the printer.

#### Warning

Alcohol is flammable; keep alcohol-soaked wipes and swabs away from hot surfaces.

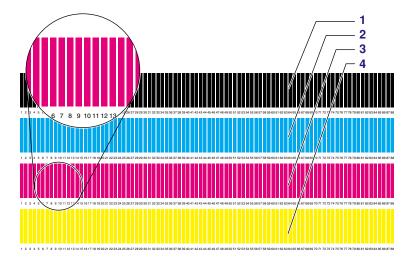
### Light stripes on prints

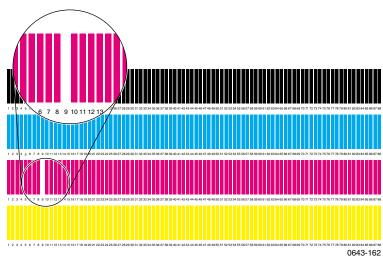
If prints have narrow, lengthwise stripes that are faded or the wrong color, or prints have missing colors, run the automatic printhead-cleaning sequence from the printer's front panel.



- 1. When the **Ready to Print** message appears, scroll to **Menu**; press **Select**.
- **2.** Scroll to **Troubleshooting**; press **Select**.
- 3. Scroll to Eliminate Light Stripes; press Select.
  - A series of front panel messages indicate the condition of the printer as it progresses through a sequence of automatic cleaning routines. The printer outputs a test page at the end of the cleaning sequence you can use to confirm the success of the procedure.

**4.** Examine the test page, checking for any missing color bars. The following illustration shows a correct Test Page with black (1), cyan (2), magenta (3), and yellow (4). Also shown is an example of a Test Page with a missing color bar in the magenta.





**5.** If one or more of the color bars are still missing or are light, repeat the cleaning sequence.

#### **Note**

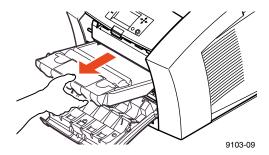
The second cleaning sequence implements a more extensive cleaning of the printer, which may take longer for the printer to execute than the previous cleaning.

- **6.** Return the printer to normal operation by scrolling to **Exit** and pressing **Select**. The **Ready to Print** message appears when the printer is returned to normal operation.
- 7. If your prints still have color stripe problems after the third cleaning sequence, turn off the printer for at least 4 hours to allow the ink to solidify. When the printer is turned back on, it performs a self-cleaning routine that may resolve the problem.
- **8.** If the problems persist, perform two more **Eliminate Light Stripes** cleaning procedures.
- **9.** If your prints still have color stripe problems, service may be required.

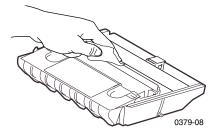
### Cleaning for oily streaks

If your prints show oily streaks, you can clean the wiper blade that is located inside the maintenance drawer (A).

1. Open the front cover and remove the maintenance drawer (A).



**2.** Use a lint-free wipe to gently wipe any excess debris from the clear plastic wiper blade.



**3.** Reinsert the maintenance drawer into the printer.

### Cleaning for ink smears: internal paper path

Clean the printer's internal paper path surfaces if your prints have stray ink marks on the front or the back.



#### **Caution**

Always use clean sheets of paper to clean the paper path. Do not reuse cleaning sheets. High-grade, heavier papers, such as  $120 \text{ g/m}^2$  (32 lb.) bond, work best.

- 1. Load high-grade paper into the printer and make sure that the tray's media selector switch is set to **Paper**. If your printer is configured with just the upper media tray, load that tray and set the media selection switch to **Paper**. If you have installed one or two High-Capacity Paper Tray Assemblies, load either the upper tray or the lower tray. The lower tray is the default; if you use the upper or middle paper tray, make sure that the printer's default has been set. Refer to *Selecting the source for cleaning pages* on page 122 for details.
- **2.** When the printer is on and the **Ready to Print** message appears in the front panel, scroll to **Menu**; press **Select**.
- **3.** Scroll to **Troubleshooting**; press **Select**.
- 4. Scroll to Remove Ink Smears; press Select.

- **5.** After a short delay during the warm-up period, the printer begins an automatic sequence of feeding several clean sheets of paper from the media tray selected as the cleaning page source.
- **6.** When the cleaning sequence is complete, inspect the last sheet of paper fed through the printer. If the printer is not clean, repeat the cleaning sequence.
- **7.** Scroll to **Exit**; press **Select**. After a warm-up cycle, the printer returns to normal operation.

#### Note

If the cleaning procedure is cancelled early, there may be a delay before the printer is ready to perform two-sided printing.

### If the ink smear problem persists:

Refer to the following two procedures for directions on cleaning paper-feed rollers and the paper-exit path.

### Cleaning for ink smears: paper-feed rollers

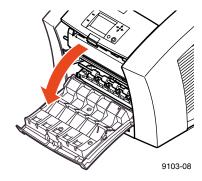
The paper-feed rollers carry the print media from the media tray and manual feed slot through the printer. Occasionally, stray ink particles become attached to the paper-feed rollers, creating slick roller surfaces that cause media to feed improperly. If ink smear problems persist after you have performed the "Cleaning for ink smears: internal paper path" procedure, then clean the paper-feed rollers.



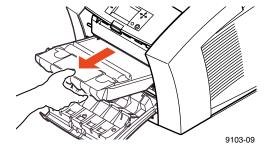
#### **Caution**

Hot surfaces exist behind the middle paper-feed rollers. To avoid personal injury during cleaning procedures, do not reach in behind these rollers.

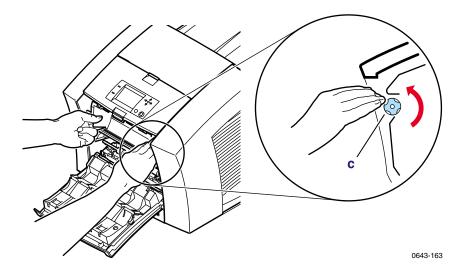
1. Open the front cover.



**2.** Remove the maintenance drawer (A) from the printer.

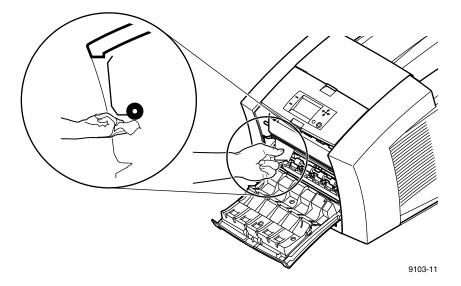


- **3.** The upper paper-feed rollers are located above the slot for the maintenance drawer (A). To clean these rollers:
  - **a.** Use a prepackaged alcohol-soaked wipe, or use a lint-free cloth with 90-percent isopropyl alcohol.
  - **b.** Place the cleaning wipe against each upper rubber roller, pressing to create pressure against the roller.
  - **c.** Use the blue thumbwheel to turn the upper rollers. The upper rubber rollers should rotate *four or five complete revolutions* for each roller segment to ensure proper cleaning. Scrub each roller thoroughly. If the wipe becomes dirty, discard it and use another.

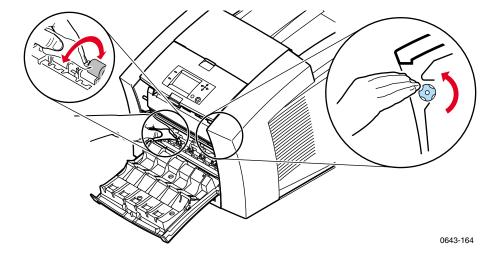


- **4.** To clean the middle rubber feed roller behind the shiny metal plate:
  - **a.** Use a prepackaged alcohol-soaked wipe, or use a lint-free cloth with 90-percent isopropyl alcohol. Place the wipe against the underside of each middle roller.
  - **b.** Manually rotate the middle roller.

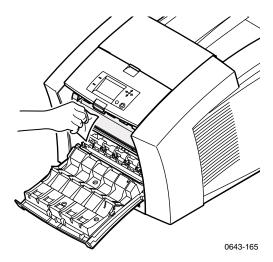
**c. Scrub each roller thoroughly.** If the wipe becomes dirty, discard it and use another.



- **5.** The lower paper-feed rollers are located below the maintenance drawer (A): one set of rollers is black rubber; the other set is white plastic. To clean the lower rollers:
  - **a.** Use a prepackaged alcohol-soaked wipe, or use a lint-free cloth with 90-percent isopropyl alcohol. Place and hold the cleaning wipe on top of the white and black rollers.
  - **b.** Use the blue thumbwheel to turn the rollers. Rotate the rollers *four or five complete revolutions* for each roller segment to ensure proper cleaning.
  - **c. Scrub each roller thoroughly until clean.** If the wipe becomes dirty, discard it and use another.



**6.** To clean the shiny metal plate, use a prepackaged alcohol-soaked wipe, or use a lint-free cloth with 90-percent isopropyl alcohol.



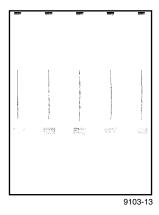
- 7. Put the maintenance drawer (A) back into the printer.
- **8.** Close the front cover.

### Cleaning for ink smears: paper-exit path

If you have already performed the other "Cleaning for ink smears" procedures described earlier in this chapter but problems persist, you should clean the paper-exit path. Refer also to *Cleaning for ink smears: paper-feed rollers* on page 129.

Occasionally, stray ink particles and oil become attached to the Rapid Release Guide, rollers, and guides under the exit cover causing ink streaks or marks on the top edge, front, or back of prints. When this occurs, you must clean these parts using alcohol-soaked wipes.

#### Sample ink smear: paper-exit path

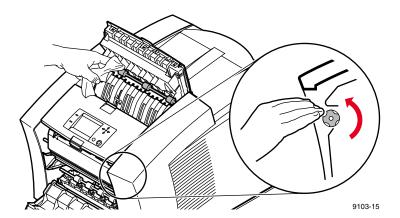


#### **Caution**

To avoid damaging the print drum and Rapid Release Guide, never use any sharp objects in this area, or scrape excess ink with a tool or fingernail.

- 1. To clean the rubber exit rollers:
  - **a.** Wrap an alcohol-soaked wipe around the index finger of one hand.
  - **b.** Press your wipe-covered finger against each roller.

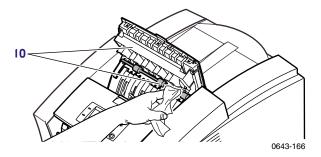
**c.** Use the thumbwheel to turn the rollers. Rotate the rollers *four or five complete revolutions* for each roller segment to ensure proper cleaning.



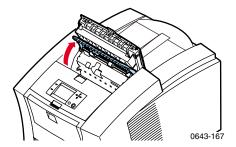
#### Note

You may notice some staining of the exit rollers while performing the cleaning procedure; this is normal and does not indicate additional cleaning is necessary. Simply clean rollers to remove any build-up of ink

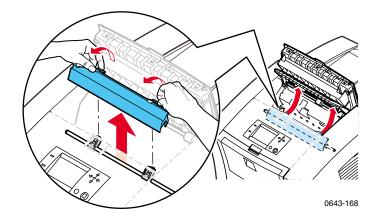
2. To clean the two sets of ribbed exit guides under the exit cover, gently wipe the raised ribs using an alcohol-soaked wipe.



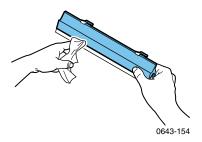
3. Lift the blue paper guide.



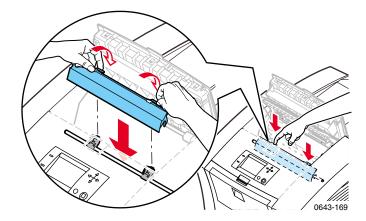
**4.** Handle the Rapid Release Guide carefully to avoid bending or damaging the clear plastic edge. Lift up on the blue tabs and remove the Rapid Release Guide. Do not use any sharp objects in this area of the printer.



5. Gently wipe the clear plastic Rapid Release Guide with a pre-soaked alcohol cloth.



- 6. If the Rapid Release Guide is damaged, replace it.
- **7.** Reinstall the Rapid Release Guide, pressing down on the blue tabs to snap the guide into place.



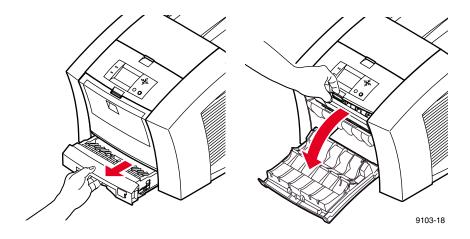
**8.** Close the exit cover.

### Cleaning for media tray jams

If the printer incorrectly feeds paper or transparencies, or feeds more than one sheet at a time from the media tray, refer to *Preventing media jams* on page 118 before cleaning the printer. If rollers are visibly dirty, perform the following cleaning procedures.

### Cleaning the media-pick roller

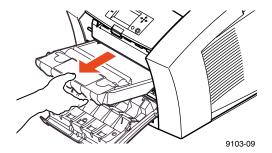
- 1. Remove the media tray from the printer.
- **2.** Open the front cover.



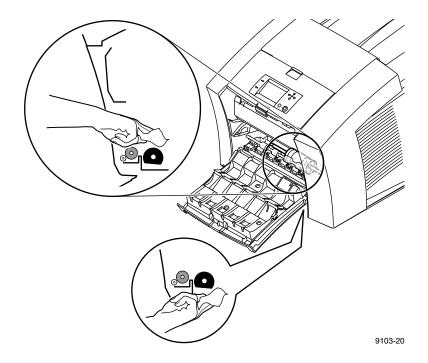
#### Caution

Hot surfaces exist behind the upper paper-feed rollers. To avoid personal injury during cleaning procedures, do not reach in behind the paper-feed rollers.

**3.** Remove the maintenance drawer (A) from the printer.

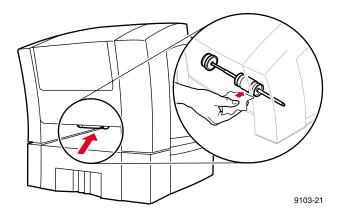


- **4.** To clean the top surface of the media-pick roller:
  - **a.** Locate the top of the media-pick roller behind the black rubber paper-path rollers.
  - **b.** Use a prepackaged alcohol-soaked wipe, or use a lint-free cloth with 90-percent isopropyl alcohol.
  - **c. Scrub the top surface of the media-pick roller thoroughly.** If the wipe becomes dirty, discard it and use another.



- **5.** Replace the maintenance drawer (A) in the printer.
- **6.** Close the front cover.

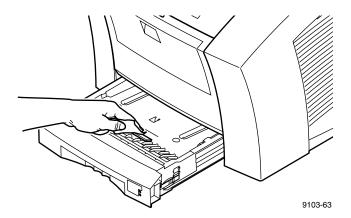
- **7.** To clean the bottom of the media-pick roller:
  - **a.** Use a prepackaged alcohol-soaked wipe, or use a lint-free cloth with 90-percent isopropyl alcohol.
  - b. To access the pick roller, reach into the media tray slot. Scrub the bottom surface of the pick roller thoroughly.



8. Replace the upper media tray in the printer.

### Cleaning the separator pad

- 1. Remove the upper media tray from the printer.
- **2.** Gently wipe the separator pad using an alcohol-soaked cloth.

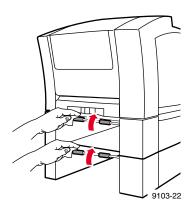


- 3. Inspect the separator pad for damage to the metal edge; it should be free of dents and lie flat against the rubber surface. If any damage is seen, the separator pad should be replaced (part number: 116-0838-00).
- **4.** Replace the upper media tray in the printer.

### Cleaning for lower tray jams: paper-feed rollers

If the printer feeds paper incorrectly or feeds more than one sheet at a time from the High-Capacity Paper Tray Assembly, refer to *Preventing media jams* on page 118 before cleaning the printer. If rollers are visibly dirty, perform the following cleaning procedures.

- 1. Remove the paper tray from the High-Capacity Paper Tray Assembly. If your printer has two assemblies, remove the tray from each one. The two paper-feed rollers for each assembly are visible when each tray is removed.
- **2.** Using an alcohol-soaked cloth, **scrub the rollers thoroughly.** Rotate the roller several times to ensure proper cleaning.



3. Replace the paper tray in the High-Capacity Paper Tray Assembly.

Cleaning Phaser 850 Printers

# Regulatory Information for Phaser 850 Printers

## Canadian EMC (Electromagnetic Compatibility) regulatory standards

- This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.
- Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limits applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministere des Communications du Canada.

### **Declaration of conformity**

Tektronix, Inc.
Color Printing and Imaging Division
P.O. Box 1000
Wilsonville, Oregon 97070-1000 U.S.A.

declares, under our sole responsibility, that the products

Phaser 850 printer (Z850)

to which this declaration relates, is in conformity with the following standard(s) or other normative document(s):

For the EC EN60950:1992	Safety of Information Technology Equipment including Electrical Business Equipment	
For the EC EN55022:1992	Limits and methods of measurement of radio Interference characteristics of Information Technology Equipment	
For the EC EN50082-1:1997	The Generic Immunity Standard Residential, Commercial, and Light Industry.	

Environmental Phenomena	Basic Standard
Radio-Frequency Electromagnetic Field immunity	EN 61000-4-3: 1995-02
Electrostatic Discharge	EN 61000-4-2: 1995-01
Fast Burst Transient	EN 61000-4-4: 1995-01
Line Surge	EN 61000-4-5: 1995-02
Radio-Frequency Conducted Immunity	EN 61000-4-6: 1996-03
Voltage Dips and Interruptions	EN 61000-4-11: 1994-06
Flicker	EN 61000-3-3: 1994-12

following the provision of the

Low Voltage Directive 73/23/EEC, the Electromagnetic Compatibility Directive 89/336/EEC, Machinery Directive 89/392/EEC.

### FCC Class B device

The equipment described in this manual generates and uses radio frequency energy. If it is not installed and used properly in strict accordance with Tektronix' instructions, it may cause interference with radio and television reception.

This equipment has been tested and verified to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interferences in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Warning

Changes or modifications not expressly approved by Tektronix can affect emission compliance and could void the user's authority to operate this product. To ensure emission compliance, use shielded interface cables.

### Phaser 850 Printer Material Safety Data Sheets

Proper management of environmental resources protects the well-being of our employees, customers, shareholders, and the communities we are a part of worldwide.

Tektronix establishes and maintains sound environmental management practices to accomplish this goal and to assure compliance with the laws, regulations, and orders of the responsible governmental authorities wherever Tektronix and its subsidiaries operate.

Tektronix, Incorporated is complying with government regulations by providing Material Safety Data Sheets for this product.

Color Printing and Imaging Division Tektronix, Incorporated

## MSDS for Silicone Oil

#### **SECTION 1- PRODUCT IDENTIFICATION**

Trade Name: Tektronix Silicone Intermediate Transfer Layer Fluid, impregnated into printer's maintenance roller.

Tektronix Part Number: 016-1822-00 (replacement standard maintenance kit) Tektronix Part Number: 016-1834-00 (replacement extended maintenance kit)

Product Use: Tektronix Phaser® 850 color printers

#### **SECTION 2 - INFORMATION ON INGREDIENTS**

Tektronix Silicone Intermediate Transfer Layer Fluid is a proprietary blend of silicone oils. Specific identities of components, and their percentage composition, are withheld as a trade secret.

#### SECTION 3 - HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE: Skin, eyes

POTENTIAL HEALTH EFFECTS: Health effects from this product are expected to be negligible,

when product is used as intended.

Immediate Effects:

Inhalation: Not an expected route of entry

Skin: May cause mild irritation. Eves: May cause mild irritation.

Ingestion: Not an expected route of exposure.

Chronic Effects: None known or expected.

SIGNS AND SYMPTOMS OF EXPOSURE

Mild skin or eye irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None known.

#### **SECTION 4 - FIRST AID MEASURES**

INHALATION: Not a route of exposure for this product.

EYES: Flush thoroughly with water. Seek medical attention if symptoms occur.

SKIN: Wash thoroughly with soap and water. Seek medical attention if symptoms of irritation occur.

INGESTION: Not a route of exposure for this product.

#### SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: Flash point of fluid is 226 degrees C, Pensky-Martens closed-cup tester.

EXTINGUISHING MEDIA: All extinguishing agents classified as B and C are effective, including dry powder(s), CO<sub>2</sub>, and halon.

FIRE FIGHTING INSTRUCTIONS: As for any fire, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH approved, and protective gear.

FIRE AND EXPLOSION HAZARDS. During a fire, irritating and toxic substances may be generated by thermal decomposition or combustion. No unusual fire hazards expected.

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

SPILL OR LEAK: Fluid is impregnated into maintenance roller. Small amounts (i.e., drops) may result from normal handling. Absorb and place in an appropriate disposal container. Clean spills thoroughly because residue can be slippery.

#### **SECTION 7 - HANDLING AND STORAGE**

HANDLING: Wash hands with soap and water after contact. Clean spills per SECTION 6. STORAGE: No special requirements.

#### SECTION 8 - EXPOSURE CONTROL - PERSONAL PROTECTION

No special protection indicated when used as intended.

## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE: Clear liquid impregnated into maintenance roller.

ODOR: Mild

SOLUBILITY IN WATER: No data

SPECIFIC GRAVITY: Specific gravity of fluid is 0.97 (water=1)

#### SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: At elevated temperatures, formaldehyde may be

generated.

HAZARDOUS POLYMERIZATION: Will not occur.

#### **SECTION 11 - TOXICOLOGICAL INFORMATION**

No toxicology data on mixture.

#### **SECTION 12 - ECOLOGICAL INFORMATION**

Not available.

#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

Fluid is not listed as RCRA hazardous waste. Dispose of in accordance with federal, state, and local regulations.

#### **SECTION 14 - TRANSPORT INFORMATION**

DOT: Not regulated.

## **SECTION 15 - REGULATORY INFORMATION**

The following information pertains to the ingredients of Tektronix Silicone Intermediate Transfer Layer Fluid:

TSCA (Toxic Substances Control Act): Listed in the TSCA inventory as verified by our suppliers. California Proposition 65: Not regulated.

SARA (Superfund Amendment and Reauthorization Acts): Not listed in SARA Section 313. Not listed as SARA Extremely Hazardous Substance.

RCRA (Resource Conservation and Recovery Act): Not listed as RCRA hazardous wastes.

The ingredients of this fluid are not listed as carcinogenic by OSHA, IARC or NTP.

#### **SECTION 16 - OTHER INFORMATION**

Original preparation date: September 17, 1999.
Prepared by CPID Environmental, Health, and Safety/JMP
Tektronix, Incorporated
P.O. Box 500
Chemical Documentation
Mail Stop 46-825
Beaverton, Oregon 97077

Printer information: 1-800-835-6100 MSDS information: (503) 685-2758

## MSDS for Ink Sticks

#### **SECTION 1 - PRODUCT IDENTIFICATION**

 Trade Name:
 Tektronix Part Number:

 ColorStix® Ink, Black
 016-1831-00, 016-1831-50

 ColorStix® Ink, Cyan
 016-1825-00, 016-1828-00

 ColorStix® Ink, Magenta
 016-1826-00, 016-1829-00

 ColorStix® Ink, Yellow
 016-1827-00, 016-1830-00

Four color "rainbow" pack 016-1833-00 Product Use: Tektronix Phaser® 850 Color Printer

#### **SECTION 2 - INFORMATION ON INGREDIENTS**

Ingredients

Fatty amide waxes

Rosin ester

Phthalate ester

Black, cyan, magenta, or yellow dye

The specific identity of ingredients, and their percentage composition, are withheld as a trade secret.

Tektronix ColorStix® solid-ink sticks are considered articles under US OSHA Hazard

Communication Standard, 29CFR1910.1200. This Material Safety Data Sheet is provided as a customer service.

#### **SECTION 3 - HAZARDS IDENTIFICATION**

ROUTES OF EXPOSURE: Skin POTENTIAL HEALTH EFFECTS

Immediate effects: None are known or expected. See Section 11 for toxicology test information.

Long term effects: None are known or expected.

Carcinogenicity: None of the ingredients of this product are listed as carcinogens by IARC, NTP,

or OSHĂ.

SIGNS AND SYMPTOMS OF EXPOSURE: None expected.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None expected.

## **SECTION 4 - FIRST AID MEASURES**

EYE: Contact unlikely. If particles get into eye, flush thoroughly with water.

SKIN: Wash skin thoroughly with soap and water.

INHALATION: Not applicable INGESTION: Not applicable

#### **SECTION 5 - FIRE FIGHTING MEASURES**

FLASH POINT: Above 200 degrees C (392 degrees F).

EXTINGUISHING MEDIA: All extinguishing agents classified as B and C are effective including dry powder(s),  $CO_2$ , and halon.

FIRE FIGHTING INSTRUCTIONS: As in any fire, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH approved, and full protective gear.

FIRE & EXPLOSION HAZARDS: These inks will burn. During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion. No unusual fire hazards expected.

#### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

SPILL OR LEAK: Not applicable.

#### **SECTION 7 - HANDLING AND STORAGE**

HANDLING: No special precautions.

STORAGE: Avoid high temperatures. Keep ink below 70 degrees C (160 degrees F).

#### SECTION 8 - EXPOSURE CONTROL - PERSONAL PROTECTION

EXPOSURE GUIDELINES: None established

ENGINEERING CONTROLS/PERSONAL PROTECTION: No special protection indicated when used as intended.

## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE/ODOR: Waxy solid. Black, blue, red, or yellow in color. Odorless.

SOLUBILITY: Not water-soluble.

SPECIFIC GRAVITY: 0.99

#### **SECTION 10 - STABILITY AND REACTIVITY**

STABILITY: Stable.

INCOMPATIBILITY WITH OTHER MATERIALS: None. HAZARDOUS POLYMERIZATION: Will not occur.

#### SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY: Not toxic, as determined by standard laboratory tests for acute oral toxicity. SKIN IRRITATION: Not a primary skin irritant, as determined by standard laboratory tests. SKIN SENSITIZATION: Not a skin sensitizer, as determined by standard laboratory tests. CARCINOGENICITY: Components or product not listed as carcinogens by IARC, NTP, or OSHA.

## **SECTION 12 - ECOLOGICAL INFORMATION**

No known impact.

#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

This product is not a hazardous waste as specified in 40CFR 261. TCLP below hazardous waste levels set by EPA. Manage and dispose of waste in accordance with all federal, state, and local regulations.

#### **SECTION 14 - TRANSPORT INFORMATION**

D.O.T.: Not regulated.

#### **SECTION 15 - REGULATORY INFORMATION**

TSCA: All components of these inks are listed in the Toxic Substances Control Act inventory as verified by our suppliers.

RCRA (Resource Conservation and Recovery Act): Not a hazardous waste as specified in 40CFR261.

TCLP below hazardous waste levels set by EPA.

CALIFORNIA PROPOSITION 65: Not regulated.

SARA (Superfund Amendment and Reauthorization Act): Not regulated.

#### **SECTION 16 - OTHER INFORMATION**

Original preparation date: December 1, 1999 Prepared by CPID Environmental, Health, and Safety/JMP Tektronix, Incorporated P.O. Box 500 Chemical Documentation Mail Stop 46-840

Mail Stop 46-840 Beaverton, Oregon 97077

Printer information: 1-800-835-6100 MSDS information: (503) 685-2758

## MSDS for CleanTex® Alcopad

#### SECTION 1 - PRODUCT IDENTIFICATION

Trade name: Tektronix Part Number:

016-1845-00 Alcopad

Product identification numbers: 806B, 806C, 806H, 806T, 806Z, 806

Chemical name and synonyms: Isopropyl Alcohol

Chemical formula: CH<sub>2</sub>CH(OH)CH<sub>3</sub>

Emergency telephone numbers: CHEMTREC (Transportation): 1-800-424-9300 Product Use: Tektronix Phaser® 850 Color Printer

#### **SECTION 2 - INFORMATION ON INGREDIENTS**

Component CAS# % OSHA PEL (ppm) ACGIL TLV (ppm)

Isopropyl alcohol 67-63-0 91.0 400 400 Deionized water 7732-18-5 9.0 NA NA

#### SECTION 3 – HAZARDS IDENTIFICATION

Product is distributed as a single-use, presaturated pad, in which all the liquid is absorbed by the applicator. Isopropyl alcohol is a flammable liquid. Eye contact will cause local irritation and burning sensations with possible injury if not removed promptly. Repeated or prolonged contact with skin may produce irritation and cause dermatitis. Exposure above TLV may cause irritation of respiratory tract and eyes along with headaches, dizziness and CNS effects. May be harmful if swallowed.

Carcinogenicity (OSHA/NTP/IARC/ACGIH): Not Listed. Medical Conditions Aggravated by Exposure: Not Listed.

#### **SECTION 4 – FIRST AID MEASURES**

EYE CONTACT: Flush with water for 15 minutes, including under eyelids. Get Medical help. SKIN CONTACT: Flush with water.

INHALATION: Remove to fresh air. Keep at rest. Restore and/or support breathing as needed. Get prompt Medical attention.

INGESTION: In the unlikely event of ingestion of a wiper, first aid measures should focus on removal of the object and preventing choking. Once removed, keep affected person at rest. Call physician immediately.

#### **SECTION 5 - FIRE-FIGHTING MEASURES**

FLASH POINT (TCC): 56 degrees F

FLAMMABLE LIMITS (% BY VOLUME): LEL: NA UEL: NA AUTOIGNITION TEMPERATURE degrees F (degrees C): NA

EXTINGUISHING MEDIA: Isopropyl-alcohol fires may be extinguished using carbon dioxide, dry chemical or alcohol foam. Water may be used to cool containers exposed to the fire.

UNUSUAL FIRE OR EXPLOSION HAZARDS: Isopropyl alcohol may release vapors which may ignite at or above flash point.

NFPA RATING: HEALTH (1)

FLAMMABILITY (3) REACTIVITY (0)

Formulation is classified as an OSHA Class IB Flammable Liquid

NA = Not Available

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Since the isopropyl-alcohol solution is completely absorbed by the applicator and the amount of isopropyl alcohol per applicator is small, the chance of a significant spill occurring is small. In the event however, that a significant amount of liquid is released, ventilate the area, especially low areas where vapors may collect, and remove all sources of ignition. Cleanup personnel need protection against liquid contact and vapor inhalation.

#### SECTION 7 - HANDLING AND STORAGE

Store in a clean, cool, ventilated area away from sources of ignition and oxidizing agents. Handle and store in a manner suitable for an OSHA class IB Flammable Liquid. Electrical services must meet applicable codes. Use non-sparking tools.

#### SECTION 8 - EXPOSURE CONTROL - PERSONAL PROTECTION

Provide ventilation to maintain TLV. Use non-sparking tools. Avoid inhalation of vapors, contact with eyes and repeated or prolonged contact with skin. Do not take internally.

#### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (80 degrees C) (180 degrees F) % VOLATILE BY VOLUME @ 25 degrees C: 100 VAPOR PRESSURE (mmHg @ 25 degrees C): 33 EVAPORATION RATE (BUTYL ACETATE-1) >1

VAPOR DENSITY (AIR = 1): <1

FORM: liquid

% SOLUBLE IN WATER @ 25 degrees C: 100

ODOR: alcohol

SPECIFIC GRAVITY (G/CC @ 25 degrees C): 0.79

APPEARANCE OF LIQUID: clear

#### **SECTION 10 - STABILITY AND REACTIVITY**

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur. INCOMPATIBILITIES / CONDITIONS TO AVOID: Caustics, amines, alkanolamines, aldehydes,

ammonia, strong oxidizing agents and chlorinated compounds. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide

#### SECTION 11 – TOXICOLOGICAL INFORMATION

Not Available

Section 12 - Ecological Information

Not Available.

#### SECTION 13 - DISPOSAL CONSIDERATIONS

Follow Federal, State and Local Regulations.

#### **SECTION 14 – TRANSPORT INFORMATION**

DOT CLASSIFICATION: Not Regulated.

Proper Shipping Name:

Hazard Class: UN Number: Packing Group: Hazard Labeling:

IATA / ICAO CLASSIFICATION: Not Regulated.

Proper Shipping Name:

Hazard Class: UN Number: Packing Group: Hazard Labeling:

IMDG CLASSIFICATION: Not Regulated.

Proper Shipping Name:

Hazard Class IMDG Page # Packing Group: Flash Point (degrees C): Marine Pollutant:

## SECTION 15 - REGULATORY INFORMATION

SARA TITLE III REPORTING:

Toxic Chemical (Section 313): Not Listed. Extremely Hazardous Substance: Not Listed.

Section 302, 304, 311, 312)

Hazard Class: Chronic Health: Yes Acute Health: Yes Fire Hazard: Yes Pressure Hazard: No Reactivity Hazard: No

TSCA INVENTORY STATUS: All components listed are on the TSCA inventory.

#### **SECTION 16 - OTHER INFORMATION**

The information provided herein is compiled from internal reports and data from professional publications. It is furnished without warranty of any kind, expressed or implied. It is intended solely to assist in evaluating suitability and proper use of the material and in implementing safety precautions and procedures. Employees should use this information as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials. All information used must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

Prepared by:

CleanTex Products 33 Murray Hill Drive Nanuet, NY 10954 June 1997

# **Specifications for Phaser 850 Printers**

## Temperature

Operating: 10 degrees C to 32 degrees C (50 degrees F to 90 degrees F)

Non-operating: -30 degrees C to +60 degrees C (-22 degrees F to 144 degrees F)

## Humidity

Operating: 10% to 80% relative humidity, non-condensing Non-operating: 10% to 95% relative humidity, non-condensing

#### Altitude

Operating: 0 to 2438 m (0 to 8000 ft.) above sea level Shipping: 0 to 15000 m (0 to 49200 ft.) above sea level

## Primary voltage ranges

90 - 140 VAC, 110 VAC nominal 180 - 264 VAC, 220 VAC nominal

## Frequency range

47 to 63 Hz

## **Primary fusing**

125 VAC, 250 VAC, 10 Amps and 6 Amps (Not user-accessible)

## **Power Consumption**

State	Typical Power	Maximum Allowable
Continuous printing	220 watts per hour	600 watts per hour
Idle	180 watts per hour	300 watts per hour
Standby	130 watts per hour	not applicable
Energy Star (optional)	not applicable	30 watts per hour

## **Dimensions of the printer** (without a High-Capacity Paper Tray Assembly)

Depth: 600 mm (23.5 in.) Width: 432 mm (17 in.) Height: 390 mm (15.3 in.)

## Weight of the printer

36 kg (79 lb.)

## **Dimensions of one High-Capacity Paper Tray Assembly**

Height: 127 mm (5 in.) Depth: 530 mm (20.875 in.) Width: 440 mm (17.375 in.)

## Weight of one High-Capacity Paper Tray Assembly

9.1 kg (20 lb.)

#### Sound level

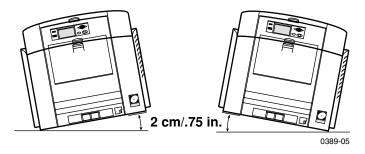
Sound Pressure ( $L_{pA}$ ); Sound Power ( $L_{wA}$ )

 $\begin{array}{ll} \mbox{Printing:} & \mbox{$L_{pA}$$< 60 dB (A)$} \\ & \mbox{$L_{wA}$$< 7.2 Bels (A)$} \end{array}$ 

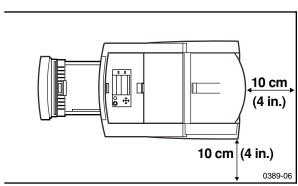
Idle:

 $\begin{array}{l} L_{pA} < 45 \text{ dB (A)} \\ L_{wA} < 5.6 \text{ Bels (A)} \end{array}$ 

## **Printer tilt**



## **Printer clearances**



Specifications for Phaser 850 Printers

## Index

```
Numerics
1st Page Preview
   resetting the timeout 100
   using 100
   using with PhaserPrint 88
Α
accessories
   ordering information 9
adding ink sticks 44
adjusting
   low-resolution images 75
Adobe Photoshop plug-in 82
alcohol
   purity of 122
   using for cleaning 122
alcohol wipes MSDS 149
altitude, operating range 152
Apple Printer Utility
   using 95
Automatic color correction 17
automatic tray switching 102
Black and White color correction 17
cart for printer, ordering information 12
CD-ROM
   contents 107
cleaning
   Eliminate Light Stripes 123
   for High-Capacity Paper Tray Assembly jams 139
   for print quality 57
   ink smears from internal paper path 127
   ink smears from paper-exit path 133
```

```
ink smears from paper-feed problems 129
   lower pick rollers 139
   oily streaks 126
   overview 122
   precautions using alcohol 122
   print drum 133
   supplies, illustrated 122
   using isopropyl alcohol 122
cleaning kit
   contents 122
   ordering information 11
cleaning pages
   changing the media tray source 122
clearing paper jams (brief) 50
CMYK Sampler, Macintosh utility file 106
collating multiple copies 76
color charts
   CMYK 104
   HSB 104
   PANTONE Color 78
   printing from a Macintosh 106
   printing from the front panel 105
   RGB 104
Color Connection web site 107
color corrections
   Automatic 17
   Black and White 17
   Commercial Press 17
   DIC 17
   Euroscale Press 17
   FujiProof 17
   None 17
   SNAP Press 17
   sRGB Display 17
```

SWOP Press 17
Toyo 17
Vivid Color 17
ColorStix ink
loading 44
ordering information 9
Commercial Press color correction 17
consumables
adding ink sticks 44
Maintenance Kit 48
D
declaration of conformity 142
DIC color correction 17
divider pages 77
downloading files from servers
Tektronix ftp server 94
World Wide Web 93
downloading files to the printer
Apple Printer Utility 95
Macintosh 95
PC 97
Windows 3.1 97
Windows 95 97
downloading fonts 72
DP Feature Set, ordering information 12
drum fluid
cleaning 133
duplex
troubleshooting 113
E
Eliminate Light Stripes
brief procedure 57
cleaning procedure 123
email notification 68, 108

```
enabling and disabling the Startup Page 119
energy saving mode 102
Enhanced print quality mode 16
envelopes
   guidelines 27
   printing details 26
   printing from Microsoft Word, Macintosh 27
   printing from Microsoft Word, Windows 30
   printing from the manual-feed slot 22
   sizes 20
Euroscale Press color correction 17
Fast Color print quality mode 16
Feature Set, DP, ordering information 12
Font Sampler, Macintosh utility file 74, 106
fonts
   downloading 72
   Macintosh 73
   printing a list of resident fonts 74
   sampler, printing 74
   TrueType 72
FONTS.PS, PC utility file 74, 106
frequency range 152
front panel
   1st Page Preview 100
   About My Printer 15
   buttons 15
   Eliminate Light Stripes 123
   Help 15
   introduction 14
   light intensity 102
   Menu 15
   menus 120
   messages, troubleshooting 109
```

Printer Demo 15
FTP server
accessing 68, 108
downloading files from 94
FujiProof color correction 17
H
hard disk, ordering information 12
help pages, printer 108
High Resolution Photo
paper, ordering information 9
paper, printing on 37
print quality mode 16
High-Capacity Paper Tray Assembly
cleaning the paper-pick rollers 139
misfeeds 139
ordering information 12
paper jams 139
HSB Sampler, Macintosh utility file 106
I
IDE hard drive, ordering information 12
Image Smoothing 75
using with PhaserPrint 88
information resources 65
ink smears
cleaning internal paper path 127
cleaning paper-exit path 133
cleaning paper-feed rollers 129
ink sticks
loading 44
MSDS 147
ordering information 9
Intelligent Ready
short overview 102
internal printer pages 108

```
isopropyl alcohol, see alcohol
J
jams, paper
   brief procedure 50
jams, trouleshooting 110
job accounting 69
job collating 76
job information 69
job separation pages 77
L
labels
   guidelines 39
   ordering information 10
   printing on 38
   printing on wrong side 114
   storing 39
letterhead paper
   printing on wrong side 113
light stripes
   full procedure 123
light stripesbrief procedure 57
lightstripes
   troubleshooting, full procedure 123
low-resolution images, adjusting for 75
Macintosh utility files 95
   CMYK Sampler 106
   Font Sampler 74, 106
   HSB Sampler 106
   Menu Long 120
   Menu Short 120
   RGB Sampler 106
maintenance
   cleaning the printer 122
```

Phaser 850 Color Printer

160

```
maintenance drawer
   wiper blade 126
Maintenance Kit
   MSDS 145
   ordering information 10
   replacing 48
manual feed
   2-sided printing 40
   single-sided printing 22
   supported media 21
margins
   envelopes 20
   paper 19
Material Safety Data Sheets (MSDS) 144
media
   ordering information 9
   tips 18
media jams
   cleaning lower paper-pick rollers 139
   exit cover 50
   front cover 53
   manual feed 54
   output after clearing 118
   preventing 118
   trays 55
   troubleshooting 110
media trays
   lower tray jams, cleaning for 139
memory, printer, ordering information 11
Menu Long, Macintosh utility file 120
Menu Short, Macintosh utility file 120
MENULONG.PS, PC utility file 120
MENUSHRT.PS, PC utility file 120
misfeeds
```

```
High-Capacity Paper Tray Assembly 139
   see also media jams
modes
   print quality 16
moving the printer 63
MSDS
   alcohol wipes 149
   ink sticks 147
   silicone oil 145
multiple copies, collating 76
None color correction 17
oil (printer drum fluid), cleaning 133
online color resource 65
online services 68, 108
P
PANTONE Colors
   installing printer files 79
   methods of printing 78
   printer-specific colors 78
   printing the color chart from a Macintosh 80
   printing the color chart from a PC 81
   selection books 78
paper
   jams (brief) 50
   margins 19
   ordering information 9
   print area 19
   sizes 19
   tips 18
paper jams
   exit cover 50
   front cover 53
```

```
manual feed 54
   trays 55
paper jams, troubleshooting 110
paper pick roller cleaning, upper 139
paper trays
   ordering information 11
PC utility files
   FONTS.PS 74, 106
   MENULONG.PS 120
   MENUSHRT.PS 120
PhaserLink Printer Management Software
   brief description 108
PhaserLink Printer Management software 69
PhaserPrint plug-in
   compatibility requirements 82
   for Photoshop 82
   installing for Macintosh 82
   installing for Windows 83
   selecting options 85
   starting the plug-in 84
PhaserShare Token Ring network card, ordering information 13
Photoshop plug-in 82
Plug-in, Adobe Photoshop, using 82
power consumption specifications 152
previewing a job 100
primary fusing 152
primary voltage ranges 152
print area
   envelopes 20
   paper 19
print drum, cleaning 133
print features
   automatic tray switching 102
   collating multiple copies 76
```

```
controlling through PhaserLink 69
   previewing 100
print log 69
print quality modes 16
   Enhanced 16
   Fast Color 16
   High Resolution/Photo 16
   Standard 16
print quality problems
   troubleshooting 117
print separation pages 77
print speed 16
printed colors, problems with 115
printer
   cart, ordering information 12
   color corrections 17
   dimensions 152
   feature set, ordering information 12
   front panel 14
   front panel menus 120
   internal pages 108
   memory, ordering information 11
   moving 63
   print speed 16
   quality modes 16
   shipping 64
   station, ordering information 12
Q
Quick Collate option 76
   using with the 1st Page Preview option 76
R
Rapid Release Guide
   cleaning 134
   cleaning (brief procedure) 61
```

ordering a replacement 11
paper jam 51
regulatory standards 141
replaceable parts
ordering information 11
RGB Sampler, Macintosh utility file 106
S
scaling images
using PhaserPrint 89
separation pages 77
server, FTP, Tektronix
downloading files from 94
setting
front panel intensity 102
shipping the printer 64
silicone oil MSDS 145
slip sheet 77
smears
ink 62
oil or ink 59
SNAP Press color correction 17
specifications 152
speed of printing 16
sRGB Display color correction 17
Standard print quality mode 16
standby mode 102
Startup Page
enable or disable 119
streaks, ink 60
stripes on prints, removing 123
supplies
ordering information 9
SWOP Press color correction 17
Sys/Start Job, enable or disable 121

```
T
TekColor color corrections 17
TekSMART Knowledge Base 108
Tektronix
   Color Printer Information Server 94
   FTP server, downloading files from 94
   web site 108
Toyo color correction 17
transparencies
   ordering information 10
   printing from standard tray 32
   printing from Transparency/Label Tray 35
   printing manual feed 22
   sizes 19
transparency trays
   ordering information 11
tray switching 102
trays
   high capacity 35
   loading 32
   optional assembly 33
   ordering information 11
   standard 31
   Transparency/Label Tray 35
troubleshooting
   black and white prints instead of color 115
   duplex 113
   Eliminate Light Stripes 123
   Error ## 112
   front panel messages 109
   ink smears 127
   labels are printed on wrong side 113
   labels printing on wrong side 114
   letterhead paper printing on wrong side 113
```

## Index

light stripes, brief procedure 57 media jams 50 paper jams, preventing 118 print quality problems 117 print quality problems (brief) 57 printed colors 115 smears, ink 62 smears, oil or ink 59 streaks, ink 60 tools to help 107 two-sided printing 113 TrueType fonts 72 two-sided printing troubleshooting 113 Usage Profile reports brief overview 70 utility files Macintosh, using 95 PC, using 97 V Vivid Color color correction 17 voltage ranges 152 W World Wide Web downloading files from 93