

Output Devices

TEX Output Devices

Don Hosek

Introduction

The number of device drivers (especially in the UNIX world) and proliferation of distribution venues for those drivers has caused it to be impossible to retain the old format for the driver listings and provide a useful amount of information (not to mention the difficulties in maintaining such a monster). The listings are in the process of being installed into a database to simplify answering driver queries and maintenance of information; this should allow future occurrences of these listings to be somewhat timelier.

The information is now broken down into four sections, one for each of laser xerographic printers, impact printers, phototypesetters, and screen displays. The listings are first by output device then by computer hardware, except for the previewers which are listed by computer. In those cases where a driver for a given printer runs on more than one computer, the description of the driver is listed just under the name of the printer and cross-reference is made to it under each computer on which it runs. Difficult-to-classify drivers (*e.g.*, those which, rather than drive printers directly, drive some generic graphic interface) are put at the end of the impact printer section for lack of a better place. All suppliers are given in a final section.

The old tables have been replaced by simplified tables which indicate the existence of a driver for a given printer/computer combination by referring to the page number on which that combination's listing begins. If no page number is present, we are unaware of a driver for the combination. These tables, which begin on page 567, can therefore be used as an index into the listings.

In coming volumes of *TUGboat*, the complete driver listings will appear in the first regular issue with updates published as necessary in subsequent regular issues for that year.

As before, corrections, updates, and new information for the list are welcome; they may be sent to me at dhosek@ymir.claremont.edu or via postal mail to the address listed on 483.

Contents

Drivers for Laser Xerographic and Electro-Erosion Printers	545
Drivers for Impact Printers and Miscellaneous Output Devices	553
Drivers for Phototypesetters	558
Screen Previewers	559
Amiga	559
Apollo	559
Atari ST	559
Cadmus 9200	559
Data General MV	559
DEC Rainbow PC100	559
DEC-20	559
DEC RISC Ultrix	559
HP9000/500	559
IBM MVS	560
IBM PC	560
IBM PC/RT	560
IBM VM/CMS	560
Sun Workstation	561
Unix	561
VAX/VMS	561
Vaxstation/Unix	562
Vaxstation/VMS	562
Supplier Information	562

Drivers for Laser Xerographic and Electro-Erosion Printers

Agfa P400

DVIP400 (by Bernd Schulze). Uses PXL files. Allows landscape printing and inclusion of P400 bitmap graphics. Written in WEB. Source available on request.

- IBM MVS

DVIP400 (by Bernd Schulze). See description above. Cost: 300-1848DM. Suppliers: Systemhaus für Elektronisches Publizieren.

- IBM PC

DVIP400 (by Bernd Schulze). See description above. Cost: 300-1848DM. Suppliers: Systemhaus für Elektronisches Publizieren.

- IBM VM/CMS

DVIP400 (by Bernd Schulze). See description above. Cost: 300-1848DM. Suppliers: Systemhaus für Elektronisches Publizieren.

- Siemens BS2000

Unspecified program. Suppliers: Universität des Saarlandes.

- Unix

DVIP400 (by Bernd Schulze). See description above. Cost: 300-1848DM. Suppliers: Systemhaus für Elektronisches Publizieren.

Unspecified program. Suppliers: Universität des Saarlandes.

- VAX/VMS

DVIP400 (by Bernd Schulze). See description above. Cost: 300-1848DM. Suppliers: Systemhaus für Elektronisches Publizieren.

Canon LBP-A2, LBP-8

DVICAN (by Nelson H. F. Beebe). Uses GF, PK or PXL files. Written in C. Source is included.

- Atari ST

DVICAN (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- DEC-20

DVICAN (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

- IBM PC

DVICAN (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), Radel, Personal T_EX.

- Unix

DVICAN (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

Unspecified program. Suppliers: Canon.

- VAX/VMS

DVICAN (by Nelson H. F. Beebe). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

Cordata LP300

- IBM PC

PC Laser/Cordata. Requires 512K RAM disk. Cost: \$195. Suppliers: Personal T_EX.

DEC LN03, LN03+

DVIL3P (by John Sauter). Uses GF, PK, and PXL files. Written in C. Source is included.

- Atari ST

DVIL3P (by John Sauter). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- DEC-20

DVIL3P (by John Sauter). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

- IBM PC

DVI2LN3 (by Flavio Rose, modified by Stanley Sawyer). Uses all three PC PXL formats and PK files. Graphics specials for line drawing included. The driver will scale fonts by multiples of 2 or 3 if no closer size would be available. Written in C. Source included. The program is distributed free of charge with the receipt of a blank disk and return mailer. Suppliers: Washington University.

DVIL3P (by John Sauter). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), Radel, Personal T_EX.

- Unix

DVIL3P (by John Sauter). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- VAX/VMS

DVI2LN3 (by Flavio Rose; modified by Edwin Bell). Uses PXL files. Allows inclusion of Sixel graphics in two formats. Written in C. Distributed in source format. Suppliers: University of Kansas.

DVIL3P (by John Sauter). See description above. Suppliers: FTP (ctrsci.utah.edu), FTP (ymir.claremont.edu), University of Utah.

DVItoLN03 3.0 (by Brian Hamilton Kelly). Uses PK and PXL files. Written in WEB. Source is included. The program is accessed through the standard DCL interface. Font downloading is on a per character basis rather than a per font basis to conserve printer memory. Large characters are printed as downloaded graphics. Support for invisible fonts and 256 character fonts is provided. The driver does not require additional RAM cartridges for the printer, but it helps. Suppliers: Aston, DECUS T_EX collection, FTP (uk.ac.aston.tex), FTP (ymir.claremont.edu).

T2/LN03. Uses GF or PK files. Distributed as executable (VMS 4.6 or later). Supports use of LN03 internal fonts and inclusion of LN03 graphics and illustrations. A RAM cartridge is suggested for optimal performance. Cost: \$495 (1600bpi magtape), \$515 (TK50 cartridge). Suppliers: Northlake Software.

Unspecified program. Suppliers: Procyon Informatics.

Golden Dawn Golden Laser 100

DVIGD (by Nelson H. F. Beebe). Uses GF, PK, and PXL files. Written in C. Source is included.

- Atari ST

DVIGD (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

- DEC-20

DVIGD (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>.

- IBM PC

DVIGD (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, Radel, Personal T_EX.

- Unix

DVIGD (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

- VAX/VMS

DVIGD (by Nelson H. F. Beebe). See description above. Suppliers: FTP <ctrsci.utah.edu>, University of Utah.

HP 2680

- HP 1000

Unspecified program. Suppliers: JDJ Wordware.

HP 2688A

- HP 1000

Unspecified program. Suppliers: JDJ Wordware.

- HP 9000/200

Unspecified program. Suppliers: Hewlett-Packard.

HP LaserJet, LaserJet Plus, II, IID, IIP, III, 2000

DVI2XX (by Gustav Neumann). Uses PK or PXL files. Written in C. Source is included. Supports odd and even-only page printing (for two-run duplex). Graphics inclusion is also supported.

DVIJE2. Uses GF, PK or PXL files. Written in C. A modified version of DVIJEP by Nelson H. F. Beebe optimized for the LaserJet Series II.

DVIJEP (by Nelson H. F. Beebe). Uses GF, PK or PXL files. Written in C. Source is included. Graphics inclusion specials are available on request.

DVIlaser/HP. Uses GF, PK, or PXL files. Allows inclusion of graphics, use of printer resident fonts, font substitution, font scaling, and magnifies or shrinks images.

- Amiga

Unspecified program. Uses PK files. Allows landscape printing. Suppliers: Radical Eye Software.

- Atari ST

DVIJE2. See description above. Suppliers: FTP <yimir.claremont.edu>.

DVIJEP (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

Unspecified program. Cost: £100. Suppliers: Oxford [2].

Unspecified program. Suppliers: T_EXsys.

Unspecified program. Suppliers: Tools GmbH Bonn.

- DEC-20

DVIJE2. See description above. Suppliers: FTP <yimir.claremont.edu>.

DVIJEP (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>.

- HP 1000

Unspecified program. Suppliers: Technical Research Center of Finland.

- IBM PC

DVI2XX (by Gustav Neumann). See description above. Suppliers: Neumann, FTP <uk.aston.ac.uk>.

DVIHPLJ (by Eberhard Mattes). Uses PK or PXL files. Supports VF files and graphics inclusion. Suppliers: Aston, FTP <rusmv1.rus.uni-stuttgart.de>, FTP <terminator.cc.umich.edu>, FTP <uk.ac.aston.tex>, Radel.

DVIJE2. See description above. Suppliers: FTP <yimir.claremont.edu>.

DVIJEP (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, Radel, Personal T_EX.

DVIlaser/HP. See description above. Allows use of HP soft fonts. Cost: \$225. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc., T_EX Users Group.

PTI Laser/HP. Allows automatic font substitution, landscape printing, and inclusion of graphics. Cost: \$195. Suppliers: Personal T_EX.

Unspecified program. Suppliers: LaserPrint.

Unspecified program. Suppliers: XOrbit.

- Prime

DVI2LJ (by Tor Lillquist; ported to Primos by Marc-Rene Uchida). Uses PXL files. Written in Pascal and PLP. Source included. Suppliers: Prime distribution tape.

- Unix

dvi2lj (by Riccardo Mazza). Written in C. Source included. The program has been ported to VAX BSD 4.3, SCO i386 Unix and various 680x0 System V systems. It can only print on A4 paper. Suppliers: FTP (orc.olivetti.com).

DVI2XX (by Gustav Neumann). See description above. Runs on an HP9000/500. Suppliers: Neumann.

DVIJE2. See description above. Suppliers: FTP (ymir.claremont.edu).

DVIJEP (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

DVIlaser/HP. See description above. Available for DEC/Unix, Apollo and Sun. Cost: \$500 workstations; \$750 mainframes. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

Unspecified program. Written for HP 9000/500. Suppliers: Max-Planck-Institut für Aeronomie.

Unspecified program. Available for Ultrix and SunOS. Other ports available on request. Cost: £100. Suppliers: Oxford [2].

Unspecified program. Suppliers: Texas A&M [2].

- VAX/VMS

DVIJE2. See description above. Suppliers: FTP (ymir.claremont.edu).

DVIJEP (by Nelson H. F. Beebe). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

DVIlaser/HP. See description above. Cost: \$500 workstations; \$750 mainframes. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

T2/jet. Uses GF or PK files. Distributed as executable (VMS 4.6 or later). Allows inclusion of PCL graphics, landscape printing, use of HP built-in and cartridge fonts as well as downloadable soft fonts. Supports duplex printing on LaserJet IID and LaserJet 2000. Cost: \$395 (1600bpi magtape), \$415 (TK50 cartridge). Suppliers: Northlake Software.

Unspecified program. Suppliers: LaserPrint.

Unspecified program. Cost: £100. Suppliers: Oxford [2].

IBM 38xx, 4250, Sherpa

DVI2LIST (by Bob Creasy and Peter Sih). Uses IBM fonts. Comes with utility program for creating IBM fonts from PXLs. Graphics inclusion is supported.

DVI2XX (by Gustav Neumann). Uses PK or PXL files. Written in C. Source is included. Supports odd and even-only page printing (for two-run duplex).

DVIIBM. Uses PXL files. Supports landscape printing.

- IBM MVS

DVI2LIST (by Bob Creasy and Peter Sih; modified by Joachim Lammarsch). See description above. Suppliers: University of Heidelberg.

DVIIBM. See description above. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [1].

- IBM PC

DVI2XX (by Gustav Neumann). See description above. Suppliers: Neumann.

- IBM VM/CMS

DVI2LIST (by Bob Creasy and Peter Sih). See description above. Suppliers: Washington State University.

DVIIBM. See description above. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [1].

- Unix

DVI2XX (by Gustav Neumann). See description above. Runs on an HP 9000/500. Suppliers: Neumann.

Imagen

DVIIMP (by Lon Willett). Uses GF, PK or PXL files. Written in C. Source is included.

DVIlaser/IMP. Uses GF, PK, or PXL files. Allows inclusion of graphics and use of resident fonts, font substitution, font scaling, and magnifies or shrinks images. VF support included.

- Amdahl MTS

DVIlaser/IMP. See description above. Supported on 'as is' basis. Cost: \$750. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

Unspecified program. Suppliers: University of British Columbia.

- Atari ST

DVIIMP (by Lon Willett). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- Data General MV

Unspecified program. Suppliers: Texas A&M [1].

- DEC-20

DVIIMP (by Lon Willett). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

Unspecified program. Suppliers: Columbia University.

- IBM PC

DVIIMP (by Lon Willett). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), Radel, Personal T_EX.

DVIlaser/IMP. See description above. Supported on 'as is' basis. Cost: \$225. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc., T_EX Users Group.

- IBM VM/CMS

DVIlaser/IMP. See description above. Supported on 'as is' basis. Cost: \$750. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

WIMPRESS. Uses RST files. A program to convert PXL files to RST files is included. Written in Pascal. Source is included. Suppliers: Weizmann.

DVITOIMP. Uses RST files. A program to convert PXL files to RST files is included. Allows inclusion of graphics, landscape printing and 2-up printing.

- Symbolics Lisp

dvi-stream (by Chris Lindblad). Written in Zetalisp. Source is included. Uses the Generic Hardcopy Interface to drive the Imagen printer. Supports landscape printing and graphics inclusion. Suppliers: Massachusetts Institute of Technology.

- Unix

DVIIMP (by Lon Willett). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

DVIlaser/IMP. See description above. Supported on 'as is' basis. Available for DEC/Unix, Apollo and Sun. Cost: \$750 multi-user systems, \$500 workstations. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

iptex (by Chris Torek). Uses GF, PK, or PXL files. Written in C with a front end written in Unix sh. Source is included. Supports landscape printing and variable printer resolution. A program for creating a DVI file containing a subset of pages of the original DVI file is included. Suppliers: University of Maryland.

Unspecified program. Available for the Apollo. Suppliers: OCLC.

Unspecified program. Suppliers: Sun.

- VAX/VMS

DVIIMP (by Lon Willett). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

DVIlaser/IMP. See description above. Supported on 'as is' basis. Suppliers: ArborText, Inc.

IMPRINT. Uses GF and PK files. Can use printer resident fonts and print in landscape orientation. Cost: \$1200 on a 600' magtape at 1600bpi. Suppliers: Northlake Software.

Kyocera F-10xx, F-20xx

- Atari ST

Unspecified program. Suppliers: T_EXsys.

- IBM PC

DVIHPLJ (by Eberhard Mattes). Uses PK or PXL files. Supports VF files and graphics inclusion. Suppliers: Aston, FTP (rusmv1.rus.uni-stuttgart.de), FTP (terminator.cc.umich.edu), FTP (uk.ac.aston.tex), Radel.

Unspecified program. Suppliers: LaserPrint.

- Unix

Unspecified program. Written in C. Suppliers: Max-Planck-Institut für Aeronomie.

- VAX/VMS

Unspecified program. Suppliers: LaserPrint.

Unspecified program. Written in C. Suppliers: Max-Planck-Institut für Aeronomie.

Océ 6750

- VAX/VMS

Unspecified program. See TUGboat 10, no. 1, pp. 56-58. Suppliers: Océ-Nederland.

Olympia Elsa

- IBM VM/CMS

DVIELSA (by Dr. Georg Bayer). Uses PXL files at 300dpi. Suppliers: Technische Universität Braunschweig.

PostScript printers

DVIALW (by Nelson H. F. Beebe and Neal Holtz). Uses GF, PK or PXL files. Graphics inclusion is supported. Written in C. Source is included.

DVIlaser/PS. Uses GF, PK, and PXL files. Allows inclusion of graphics, use of printer resident fonts, font substitution, font scaling, landscape printing and magnifies or shrinks images. A program AFtoTF is included for generating TFM files from AFM files. VF support included.

DVIPS (by Tom Rokicki). Uses PK files. Allows landscape printing, inclusion of PostScript graphics and use of internal and downloadable PostScript fonts. VF support is included. Written in C. Source included.

dvitops (by James Clark). Uses PK files. Allows use of printer-resident and downloaded PostScript fonts. Allows inclusion of graphics files and inline PostScript as well as arbitrary linear transformations to regions of the DVI file. Output is designed so that each page depends only on itself and the preamble. There is no device-dependence in the PostScript code. Included are programs for converting AFM files to PL files (*aftopl*) and for converting Adobe fonts from IBM PC format to straight PostScript (*afbtops*). Written in C. Distributed as source.

- Amiga

Unspecified program. Uses PK files. Allows inclusion of graphics and landscape printing. Suppliers: Radical Eye Software.

- Atari ST

DVIALW (by Nelson H. F. Beebe and Neal Holtz). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- DEC-20

DVIALW (by Nelson H. F. Beebe and Neal Holtz). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

- IBM PC

DVIALW (by Nelson H. F. Beebe and Neal Holtz). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), Radel, Personal T_EX.

DVilaser/PS. See description above. Cost: \$225. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc., T_EX Users Group.

dvitops (by James Clark). See description above. Suppliers: Aston, Clark, FTP (uk.ac.aston.tex).

PTI Laser/PS. Allows landscape printing, use of PostScript fonts, and inclusion of PostScript graphics. Cost: \$195. Suppliers: Personal T_EX.

- IBM VM/CMS

DVilaser/PS. See description above. Cost: \$750. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

- Prime

DVI2PS (by Tang Tang). Uses PXL files. Written in C. Source included. Suppliers: Prime distribution tape.

DVIALW (by Mark Furon). Uses PXL files. Allows inclusion of PostScript. Written in C. Source is included. Suppliers: Prime distribution tape.

- Symbolics Lisp

dvi-stream (by Chris Lindblad). Written in Zetalisp. Source is included. Uses the Generic Hardcopy Interface to drive the PostScript printer. Supports landscape printing and graphics inclusion. Suppliers: Massachusetts Institute of Technology.

- Unix

dvi2ps. Uses PXL files. Allows landscape printing and graphics inclusion. Written in C. Source is included. Suppliers: Massachusetts Institute of Technology.

dvi2ps (modified by Paul Leyland). Uses PK files. Suppliers: Oxford [1].

dvi2ps (modified by Piet van Oostrum). Uses PK files and PostScript built-in fonts. Suppliers: van Oostrum.

dvi3ps (by Kevin Coombes). Uses GF, PK or PXL files. Supports use of printer-resident fonts, Asian fonts with the technique specified by the Japan T_EX Users Group, runtime settable printer resolution, PSFig specials, and page selection. Suppliers: FTP (stag.math.lsa.umich.edu).

DVIALW (by Nelson H. F. Beebe and Neal Holtz). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

DVilaser/PS. See description above. Available for DEC/Unix, Apollo and Sun. Cost: \$500 workstations; \$750 mainframes. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

DVIPS (by Tom Rokicki). See description above. Suppliers: FTP (labrea.stanford.edu).

dvitops (by James Clark). See description above. Suppliers: Aston, Clark, FTP (june.cs.washington.edu), FTP (uk.ac.aston.tex), FTP (ymir.claremont.edu).

dvitps (by Stephan v. Bechtolsheim). Uses GF, PK, and PXL files. Fonts may have up to 256 characters. Allows use of printer-resident PostScript fonts. Supports inclusion of PostScript graphics (through PSFIG), graphics through the tpic specials, arbitrary extension and mapping of the PostScript fonts, memory management, and generation of TranScript-compatible code. Included are programs for creation of TFM files for PostScript fonts (*pfd2tfm*) and for management of PostScript font mappings (*printpdr*). Suppliers: Bechtolsheim, FTP (cs.purdue.edu), Unix distribution tape.

Unspecified program. Suppliers: Carleton University.

- VAX/VMS

DVIALW (by Nelson H. F. Beebe and Neal Holtz). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

DVilaser/PS. See description above. Cost: \$500 workstations; \$750 mainframes. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

DVIOUT (by Scott Campbell). Uses GF, PK, and PXL files. Allows landscape printing, inclusion of MacDraw bitmaps, inclusion of Tektronix plot files, drawing of line, arc, point, and filled polygons through `\special` commands, and `TEX-XET` support. Written in C and Macro-32. The program comes with a well-featured PostScript symbiont. Suppliers: DECUS `TEX` Collection, FTP (ymir.claremont.edu).

DVIPS (by Tom Rokicki). See description above. Suppliers: DECUS `TEX` Collection.

Dvi/PS (by Alec Dunn). Uses GF, and both word- and byte-packed PXL files. Allows landscape printing, inclusion of PostScript graphics (described in *TUGboat* 8#2), and use of PostScript fonts. A PostScript-from-Mac program is available on request. The program communicates with the printer to determine what resolution/set of fonts to use. Written in Pascal. Source not included. Cost: \$500. Suppliers: University of Sydney.

PSPRINT (by Andrew Trevorrow). Uses PK and PXL files. Allows landscape printing, inclusion of PostScript graphics and use of printer-resident fonts. Written in DCL and Modula-2. Source included. Suppliers: Aston, DECUS `TEX` Collection, FTP (aston.ac.uk), FTP (ymir.claremont.edu), INFN/CNAF.

T2/script. Uses GF or PK files. Allows landscape printing, use of built-in and downloadable PostScript fonts, inclusion of graphics (rotated to match surrounding text) and produces output conforming to Adobe Document Structuring Conventions v2.1. Cost: \$495 (1600bpi magtape), \$515 (TK50 cartridge). Suppliers: Northlake Software.

QMS Kiss, Smartwriter

- Amiga

Unspecified program. Uses PK files. Allows landscape printing. Suppliers: Radical Eye Software.

QMS Lasergrafix

dvi2qms (Chris Lindblad). Uses PXL files. Includes support for landscape printing and graphics inclusion. Can be run as a filter. Written in C. Source included.

GTEX. Uses PK files. This driver is part of a CGM interpreter package and shares output drivers with that package.

DVilaser/QMS. Uses GF, PK, and PXL files. Allows inclusion of graphics, use of printer resident fonts, font substitution, font scaling, landscape printing, and magnifies or shrinks images. VF support included.

DVIQMS. Uses PXL files. Supports landscape printing.

- Amdahl MTS

DVilaser/QMS. See description above. Supported on 'as is' basis. Cost: \$750. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

- Amiga

Unspecified program. Uses PK files. Allows landscape printing. Suppliers: Radical Eye Software.

- Data General MV

Unspecified program. Suppliers: Texas A&M [1].

- IBM MVS

DVIQMS. See description above. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [1].

- IBM PC

DVilaser/QMS. See description above. Supported on 'as is' basis. Cost: \$225. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc., `TEX` Users Group.

- IBM VM/CMS

DVilaser/QMS. See description above. Supported on 'as is' basis. Cost: \$750. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

DVIQMS. See description above. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [1].

- Prime

DVILG8, *DVILG12*, *DVILG15* (by Norman Naugle). Uses GF, PXL, or PK files. Allows inclusion of `QUIC` commands from files or as part of the `TEX` input stream. Allows landscape printing through the `\special` command. Allows use of printer-resident fonts. Includes CRERES for creating printer-resident fonts. The Prime distribution tape includes pre-compiled copies of the programs. Written in WEB. Source included. Cost: \$150 from n^2 ; if the program is obtained from the Prime distribution tape, it is considered shareware—sites using the program are encouraged to send a \$150 contribution to n^2 Consultants. Suppliers: n^2 Consultants, Prime distribution tape.

- Siemens BS2000

DVIQMS. See description above. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [1].

- Symbolics Lisp

dvi-stream (by Chris Lindblad). Written in Zetalisp. Source is included. Uses the Generic Hardcopy Interface to drive the QMS Lasergrafix printer. Supports landscape printing and graphics inclusion. Suppliers: Massachusetts Institute of Technology.

- Unix

dvi2qms (Chris Lindblad). See description above. Suppliers: Massachusetts Institute of Technology.

GTEX. See description above. Suppliers: FTP (casce.psc.edu).

DVIlaser/QMS. See description above. Supported on 'as is' basis. Available for VAX Unix, Apollo and Sun. Cost: \$500 workstations; \$750 mainframes. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

quicspool (Scott Simpson). Uses PK files. Supports landscape printing and all 4.2 BSD spooler functions for QMS QUIC printers. Also included are drivers for troff, programs to convert TFM to troff width tables, and METAFONT code for troff fonts. Written in C with lex and yacc. Source included. Suppliers: Unix distribution tape.

Unspecified program. Runs on Sun. Suppliers: University of Delaware.

Unspecified program. Runs on Apollo. Suppliers: Scan Laser.

Unspecified program. Runs on an HP 9000/500. Suppliers: Texas A&M [2].

- VAX/VMS

GTEX. See description above. Suppliers: FTP (b.psc.edu).

DVIlaser/QMS. See description above. Supported on 'as is' basis. Cost: \$500 workstations; \$750 mainframes. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

Unspecified program. Suppliers: GA Technologies.

Unspecified program. Suppliers: n^2 Consultants.

Talaris (See also QMS Lasergrafix)

- IBM MVS

Unspecified program. Suppliers: Talaris.

- IBM PC

Unspecified program. Suppliers: Talaris.

- IBM VM/CMS

Unspecified program. Suppliers: Talaris.

- Unix

Unspecified program. Suppliers: Talaris.

- VAX/VMS

Unspecified program. Suppliers: Talaris.

Xerox 2700II, 3700, 4045

DVIX27 (by John Gourlay). Uses Xerox 2700 special fonts (the cm* fonts are supplied up to magstep 5 in this format). Written in WEB. Source included.

- CDC Cyber

Unspecified program. Suppliers: Bochum.

- DEC-20

DVIX27 (by John Gourlay). See description above. Suppliers: Xerox, Ohio State University.

- IBM VM/CMS

DVI2700 (by Maurice Vallino and Chantal Durand). Uses Xerox 2700 special fonts. Inclusion of Xerox bitmap files is made possible by the `\special` command. An auxiliary program, PXLXEROX, is provided to allow conversion of PXL files to Xerox 2700 format. Written in Pascal. Source included. Suppliers: Ecole Normale Superieure.

DVIX27 (by John Gourlay). See description above. Suppliers: Xerox.

- Unix

DVIX27 (by John Gourlay). See description above. Suppliers: Xerox.

- VAX/VMS

DVIX27 (by John Gourlay). See description above. Suppliers: Xerox.

Unspecified program. Suppliers: Brigham Young University.

Xerox 8700, 8790, 9700, 9790, 4050

DVIXER (by Paul Grosso). Written in WEB. Source included. Uses fonts preloaded onto the printer. Allows duplex printing.

TeXrox (by Thomas J. Reid). Written in C. Source included. Uses fonts preloaded onto the printer. Allows duplex printing and four basic page orientations plus special formats for booklets and reference cards. Multiple DVI files may be merged using the driver. Includes utilities for creating Xerox fonts from GF or PXL files and for creating TFM files for Xerox internal fonts.

- Amdahl MTS

DVIXER (by Paul Grosso). See description above. Supported on 'as is' basis. Cost: \$1500. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

DVIXER (by Paul Grosso; modified by Kari Gluski). See description above. Supported on 'as is' basis. Suppliers: University of Michigan.

- IBM MVS

DVIXER (by Paul Grosso). See description above. Supported on 'as is' basis. Cost: \$1500. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

TEXrox (by Thomas J. Reid). See description above. Written in C and 370 Assembler. Suppliers: Texas A&M [3].

- IBM VM/CMS

DVIXER (by Paul Grosso). See description above. Supported on 'as is' basis. Cost: \$1500. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

TEXrox (by Thomas J. Reid). Written in C. See description above. Suppliers: Texas A&M [3].

- Unix

TEXrox (by Thomas J. Reid). See description above. Tested under VM/UTS and Sun Unix. Suppliers: Texas A&M [3].

Unspecified program. Runs on Apollo. Suppliers: COS Information.

Unspecified program. Runs on Apollo. Suppliers: Scan Laser.

Unspecified program. Suppliers: University of Delaware.

- VAX/VMS

DVIXER (by Paul Grosso). See description above. Supported on 'as is' basis. Cost: \$1500 mainframes, \$1000 workstations. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

TEXrox (by Thomas J. Reid). See description above. Suppliers: Texas A&M [3].

Unspecified program. Suppliers: Advanced Computer Communications.

Drivers for Impact Printers and Miscellaneous Output Devices

Apple ImageWriter

DVIM72, DVIMAC (by Nelson H. F. Beebe). Uses GF, PK, or PXL files. *DVIM72* uses the Imagewriter at 72dpi, *DVIMAC* uses a resolution of 144dpi. Written in C.

- Acorn

DVIM72, DVIMAC (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Amiga

Unspecified program. Uses PK files. Suppliers: Radical Eye Software.

- Apple Macintosh

DVIM72-Mac 1.8 (by Jim Walker). Uses PK files. Can run in the background under Multifinder. Intended for use with OzTEX. Suppliers: FTP (giza.cis.ohio-state.edu).

- Atari ST

DVIM72, DVIMAC (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- DEC-20

DVIM72, DVIMAC (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

- IBM PC

DVIDOT (by Eberhard Mattes). Uses PK or PXL files. *DVIDOT* is a generic dot matrix printer that supports different printers through a configuration file. Supports VF files. Suppliers: Aston, FTP (rusmv1.rus.uni-stuttgart.de), FTP (terminator.cc.umich.edu), FTP (uk.ac.aston.tex), Radel.

DVIM72, DVIMAC (by Nelson H. F. Beebe). See description above. Written in Microsoft C. Suppliers: Aston, FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- IBM VM/CMS

DVIM72, DVIMAC (by Nelson H. F. Beebe). See description above. Written in Waterloo C. (Beta test version available on request.) Suppliers: University of Utah.

- Prime

DVIM72, DVIMAC (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Unix

DVIM72, DVIMAC (by Nelson H. F. Beebe). See description above. Runs on most Unix variants. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- VAX/VMS

DVIM72, DVIMAC (by Nelson H. F. Beebe). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

Unspecified program. Suppliers: Louisiana State University.

Benson 9424

- IBM VM/CMS

DVIBENA3, *DVIBENA4*, *DVIBENA5* (by Dr. Georg Bayer). Uses PXL files at 254dpi. *DVIBENA3* creates a page for DIN A3 paper, *DVIBENA4* creates a page for DIN A4 paper placing 2 pages per sheet, and *DVIBENA5* creates a page for DIN A5 paper placing 4 pages per sheet. Suppliers: Technische Universität Braunschweig.

C. Itoh 8510A

- IBM PC

DVIDOT (by Eberhard Mattes). Uses PK or PXL files. *DVIDOT* is a generic dot matrix printer that supports different printers through a configuration file. Supports VF files. Suppliers: Aston, FTP (rusmv1.rus.uni-stuttgart.de), FTP (terminator.cc.umich.edu), FTP (uk.ac.aston.tex), Radel.

Citizen 120-D

- Amiga

Unspecified program. Uses PK files. Suppliers: Radical Eye Software.

DEC LA75, LP100

DVIL75 (by John Sauter). Uses GF, PK, and PXL files. Written in C.

- Acorn

DVIL75 (by John Sauter). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Atari ST

DVIL75 (by John Sauter). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- DEC-20

DVIL75 (by John Sauter). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

DVILA (by John Gourlay). Uses PXL files. Comes with PXL2PXL, a utility for converting PXL files from one resolution to another. Written in WEB. Source included. Suppliers: Ohio State University.

- IBM PC

DVIL75 (by John Sauter). See description above. Written in Microsoft C. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- IBM VM/CMS

DVIL75 (by John Sauter). See description above. Written in Waterloo C. (Beta test version available on request.) Suppliers: University of Utah.

- Prime

DVIL75 (by John Sauter). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Unix

DVIL75 (by John Sauter). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- VAX/VMS

DVIL75 (by John Sauter). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

Epson FX/MX/JX/RX

DVIE72, *DVIEPS* (by Marcus Moehrman). Uses GF, PK, or PXL files. *DVIE72* prints at 60h × 72v resolution, *DVIEPS* prints at 240h × 216v resolution. Written in C. Source is included.

- Acorn

DVIE72, *DVIEPS* (by Marcus Moehrman). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Amiga

Unspecified program. Uses PK files. Suppliers: Radical Eye Software.

- Atari ST

DVIE72, *DVIEPS* (by Marcus Moehrman). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

Unspecified program. Suppliers: TeXsys.

Unspecified program. Suppliers: Tools GmbH Bonn.

- DEC-20

DVIE72, *DVIEPS* (by Marcus Moehrman). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

- HP 1000

Unspecified program. Suppliers: JDJ Wordware.

- HP 3000

Unspecified program. Suppliers: University of Sheffield.

- IBM PC

DVIDOT (by Eberhard Mattes). Uses PK or PXL files. *DVIDOT* is a generic dot matrix printer that supports different printers through a configuration file. Supports VF files. Suppliers:

Aston, FTP (rusmv1.rus.uni-stuttgart.de),
 FTP (terminator.cc.umich.edu),
 FTP (uk.ac.aston.tex), Radel.

DVIE72, DVIEPS (by Marcus Moehrman). See description above. Written in Microsoft C. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), Radel, University of Utah.

DVIEPS (by Gavin Melville and Gordon Findlay from the Beebe driver). Uses GF, PK, or PXL files at 240h × 216v resolution. Written in Microsoft C, no executables. The page bitmap is not held in RAM. Suppliers: Radel.

PC DOT Epson FX/RX. Cost: \$95. Suppliers: Personal T_EX.

Unspecified program. Suppliers: Texas A&M [1].

Unspecified program. Suppliers: Università Degli Studi Milan.

Unspecified program. Suppliers: University of Sheffield.

- IBM VM/CMS

DVIE72, DVIEPS (by Marcus Moehrman). See description above. Written in Microsoft C. (Beta test version available on request.) Suppliers: University of Utah.

- Prime

DVIE72, DVIEPS (by Marcus Moehrman). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Unix

DVIE72, DVIEPS (by Marcus Moehrman). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- VAX/VMS

DVIE72, DVIEPS (by Marcus Moehrman). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

Epson LQ, NEC P6/P7

- Amiga

Unspecified program. Uses GF, PK or PXL files. Based on the Beebe 2.10 drivers. Suppliers: FTP (tut.cis.ohio-state.edu).

Unspecified program. Uses PK files. Suppliers: Radical Eye Software.

- Atari ST

Unspecified program. Suppliers: T_EXsys.

- IBM PC

DVIDOT (by Eberhard Mattes). Uses PK or PXL files. DVIDOT is a generic dot matrix

printer that supports different printers through a configuration file. Can print at 180 × 180, 360 × 180 or 360 × 360. Supports VF files. Suppliers: Aston, FTP (rusmv1.rus.uni-stuttgart.de), FTP (terminator.cc.umich.edu), FTP (uk.ac.aston.tex), Radel.

DVINECLQ (by Fuyun Ling from the Beebe DVITOS program). Uses GF, PK or PXL files at 360dpi. The page bitmap is swapped to ramdisk or hard disk, or sent directly to LPT1: Distributed as executables only. Suppliers: Channel 1 BBS, Ling, Radel.

PC DOT Epson LQ. Cost: \$95. Suppliers: Personal T_EX.

Fujitsu

- Atari ST

Unspecified program. Uses PK files. Suppliers: T_EXsys.

- Cadmus 9200

Unspecified program. Suppliers: University of Köln.

GE 3000

- Unix

Unspecified program. Runs on Apollo. Suppliers: COS Information.

HP DeskJet

- Amiga

Unspecified program. Uses PK files. Suppliers: Radical Eye Software.

- Atari ST

Unspecified program. Uses GF, PK or PXL files. Based on Beebe 2.10 drivers. Comes in two versions for different memory configurations. Requires a hard disk. Suppliers: FTP (terminator.cc.umich.edu), Long.

- IBM PC

dvidjp (by Paul Kirkaas). Uses GF, PK or PXL files. Based on Beebe 2.10 drivers. Suppliers: FTP (ymir.claremont.edu).

Unspecified program. Cost: \$119. Suppliers: Personal T_EX.

Unspecified program. Cost: \$100. Suppliers: The Toolsmith.

HP InkJet

- Amiga

Unspecified program. Uses PK files. Suppliers: Radical Eye Software.

MPI Sprinter

DVIMPI (by Nelson H. F. Beebe). Uses GF, PK, or PXL files. Written in C.

- Acorn

DVIMPI (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Atari ST

DVIMPI (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

- DEC-20

DVIMPI (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>.

- IBM PC

DVIMPI (by Nelson H. F. Beebe). See description above. Written in Microsoft C. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

- IBM VM/CMS

DVIMPI (by Nelson H. F. Beebe). See description above. Written in Waterloo C. (Beta test version available on request.) Suppliers: University of Utah.

- Prime

DVIMPI (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Unix

DVIMPI (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

- VAX/VMS

DVIMPI (by Nelson H. F. Beebe). See description above. Suppliers: FTP <ctrsci.utah.edu>, University of Utah.

NDK Printstar

- IBM VM/CMS

DVINDKN, *DVINDKQ* (by Dr. Georg Bayer). Uses PXL files at 120dpi. *DVINDKN* prints lines of text horizontally, while *DVINDKQ* prints lines of text vertically. Suppliers: Technische Universität Braunschweig.

Okidata

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). Uses GF, PK, or PXL files. *DVIO72* prints at 72dpi resolution; *DVIOKI* prints at 144dpi. Written in C.

- Acorn

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Amiga

Unspecified program. Uses PK files. Suppliers: Radical Eye Software.

- Atari ST

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

- DEC-20

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>.

- IBM PC

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). See description above. Written in Microsoft C. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

- IBM VM/CMS

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). See description above. Written in Waterloo C. (Beta test version available on request.) Suppliers: University of Utah.

- Prime

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Unix

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). See description above. Suppliers: FTP <science.utah.edu>, FTP <yimir.claremont.edu>, University of Utah.

- VAX/VMS

DVIO72, *DVIOKI* (by Nelson H. F. Beebe). See description above. Suppliers: FTP <ctrsci.utah.edu>, University of Utah.

Printronix

DVIPRX (by Nelson H. F. Beebe). Uses GF, PK, or PXL files. Written in C.

- Acorn

DVIPRX (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Atari ST

DVIPRX (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- Data General MV

Unspecified program. Suppliers: Texas A&M [1].

- DEC-20

DVIPRX (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

- IBM PC

DVIPRX (by Nelson H. F. Beebe). See description above. Written in Microsoft C. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

Unspecified program. Suppliers: Texas A&M [1].

- IBM VM/CMS

DVIPRX (by Nelson H. F. Beebe). See description above. Written in Waterloo C. (Beta test version available on request.) Suppliers: University of Utah.

- Prime

DVIPRX (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Unix

DVIPRX (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- VAX/VMS

DVIPRX (by Nelson H. F. Beebe). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

Texas Instruments 855

- IBM PC

Unspecified program. Suppliers: Texas A&M [1].

Toshiba

DVITOS (by Nelson H. F. Beebe). Uses GF, PK, or PXL files. Written in C.

- Acorn

DVITOS (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Atari ST

DVITOS (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- Data General MV

Unspecified program. Suppliers: Texas A&M [1].

- DEC-20

DVITOS (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu).

- IBM PC

DVITOS (by Nelson H. F. Beebe). See description above. Written in Microsoft C. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

PC DOT Toshiba. Cost: \$95. Suppliers: Personal TEX.

- IBM VM/CMS

DVITOS (by Nelson H. F. Beebe). See description above. Written in Waterloo C. (Beta test version available on request.) Suppliers: University of Utah.

- Prime

DVITOS (by Nelson H. F. Beebe). See description above. (Beta test version available on request.) Suppliers: University of Utah.

- Unix

DVITOS (by Nelson H. F. Beebe). See description above. Suppliers: FTP (science.utah.edu), FTP (ymir.claremont.edu), University of Utah.

- VAX/VMS

DVITOS (by Nelson H. F. Beebe). See description above. Suppliers: FTP (ctrsci.utah.edu), University of Utah.

Unspecified program. Suppliers: Procyon Informatics.

Varian

- VAX/VMS

Unspecified program. Suppliers: Science Applications.

Versatec

- IBM MVS

DVIVER. Uses PXL files. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [1].

- IBM VM/CMS

DVI82 (by Yossie Silverman). Uses PXL files. Allows inclusion of raster files. Written in assembly language. Source is included. Suppliers: Weizmann Institute.

- Unix

Unspecified program. This program is included with iptex. Suppliers: University of Maryland.

Miscellaneous (generic print interfaces, special graphic formats, etc.)

- IBM PC

DVIDOT (by Eberhard Mattes). Uses PK or PXL files. *DVIDOT* is a generic dot matrix printer that supports different printers through a configuration file. Supports VF files. Suppliers: Aston, FTP <rusmv1.rus.uni-stuttgart.de>, FTP <terminator.cc.umich.edu>, FTP <uk.ac.aston.tex>, Radel.

DVIMSP (by Eberhard Mattes). Uses PK or PXL files. Creates Microsoft Paint files. Supports VF files. Suppliers: Aston, FTP <rusmv1.rus.uni-stuttgart.de>, FTP <terminator.cc.umich.edu>, FTP <uk.ac.aston.tex>, Radel.

TeX-FAX. Sends DVI files to a FAX machine. Cost: \$395 (for 4800bps FAX board), \$795 (for 9600 bps FAX board). Suppliers: Kinch Computing.

Drivers for Phototypesetters

Allied Linotype CRTronic

- VAX/VMS

Unspecified program. Suppliers: Procyon Informatics.

Allied Linotype L100, L300P

- IBM PC

Unspecified program. Suppliers: Personal TeX.

Allied Linotype L202

- IBM PC

Unspecified program. Suppliers: Personal TeX.

- VAX/VMS

Unspecified program. Suppliers: Procyon Informatics.

Autologic APS-5, Micro-5

DVIAPS. Autologic resident fonts and logo processing are supported, and a separate program that creates laser printer and screen resolution fonts from Autologic font tapes is available. VF support is provided.

- IBM PC

DVIAPS. See description above. Cost: \$3000. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

- Unix

DVIAPS. See description above. Available for VAX Unix and Sun. Cost: \$3000. Site licenses available.

Academic discounts available. Suppliers: ArborText, Inc.

Unspecified program. Runs on Apollo. Suppliers: COS Information.

Unspecified program. Runs on Apollo. Suppliers: Scan Laser.

- VAX/VMS

DVIAPS. See description above. Cost: \$3000. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

Unspecified program. Suppliers: Intergraph.

Compugraphic 8400

- HP 3000

Unspecified program. Suppliers: University of Sheffield.

- IBM PC

DVICG. VF support is provided. Cost: \$2000. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

- Unix

DVICG. VF support is provided. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

- VAX/VMS

CGTeX. Includes FDtoPL for creating TFM files for Compugraphic fonts as well as some pre-generated TFMs for selected Compugraphic fonts. Cost: \$3400 on 600' 1600bpi magtape. Suppliers: Northlake Software.

Compugraphic 8600

- CDC Cyber

Unspecified program. Suppliers: Aarhus University.

- IBM PC

DVICG. VF support is provided. Cost: \$2000. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

- IBM VM/CMS

Unspecified program. Written in WEB. Source included. Suppliers: FTP <yimir.claremont.edu>, Washington State University.

- Sperry 1100

Unspecified program. Suppliers: University of Wisconsin.

- Unix

DVICG. VF support is provided. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

- VAX/VMS

CGTEX. Includes FDtoPL for creating TFM files for Compugraphic fonts as well as some pre-generated TFMs for selected Compugraphic fonts. Cost: \$3400 on 600' 1600bpi magtape. Suppliers: Northlake Software.

Compugraphic 8800

- IBM PC

DVICG. VF support is provided. Cost: \$2000. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

- Unix

DVICG. VF support is provided. Site licenses available. Academic discounts available. Suppliers: ArborText, Inc.

Harris 7500

- Unix

Unspecified program. Suppliers: SARA.

Hell Digiset

DVIDIGI. Uses special format files. A program for converting PXL files to this format is included.

- IBM MVS

DVIDIGI. See description above. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [2].

- Siemens BS2000

DVIDIGI. See description above. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [2].

Screen Previewers

Amiga

Unspecified program. Uses PK files. Written in C. Included with AmigaTeX. Suppliers: Radical Eye Software.

Apollo

DVIAPOLLO (by Leonard N. Zubkoff). Supports GPR. Uses Apollo font files. Included is a program to convert PXL files at 118 dpi to Apollo font files. Suppliers: FTP (june.cs.washington.edu).

Preview. Uses PXL, GF, and PK files as well as tuned PostScript fonts (the base set available with PostScript printers). Features include font substitution, page magnification and shrinking, searching for character strings, selection of arbitrary pages, display of pages in two-up mode, and preview

of integrated bitmap graphics. Cost: \$500. Suppliers: ArborText, Inc.

Texx (by Dirk Grunwald). Supports X-11 Windows System. Uses PK, GF, and PXL files at output device resolution. The window size may be changed for closeups of the page. Two pages may be viewed simultaneously. Suppliers: FTP (cs.uiuc.edu).

Atari ST

DVIST (by Avy Moise and Tyler Ivanco). Suppliers: FTP (ssyx.ucsc.edu).

Unspecified program. Uses PK files. Suppliers: T_EXsys.

Unspecified program. Suppliers: Tools GmbH Bonn.

Cadmus 9200

Unspecified program. Suppliers: University of Köln.

Data General MV

Unspecified program. Suppliers: Texas A&M [1].

DEC Rainbow PC100

RBDVI 1.0. Uses a limited set of 19 CM and 5 L^AT_EX fonts built into the program for efficiency's sake. Uses font substitution to display other fonts. Fits in 150K of disk space. Cost: \$59.95. Special discount available for IRUG members. Suppliers: SullivanSFT.

DEC-20

DVIBIT (by Stephan Bechtolsheim, Bob Brown, Robert Wells, Jim Schaad, Richard Furuta, Nelson H. F. Beebe, Simon Barnes, Robin Rohlicek). Supports BBN Bitgraph Terminal. Uses GF, PK, or PXL files. Written in C. Source included. Suppliers: University of Utah.

DVIDOC (by John Gourlay). Supports ASCII output. Reads font information from TFM files and generates a text file representation of the DVI file. Suppliers: Ohio State University.

DEC RISC Ultrix

Preview. Uses PXL, GF, and PK files as well as tuned PostScript fonts (the base set available with PostScript printers). Features include font substitution, page magnification and shrinking, searching for character strings, selection of arbitrary pages, display of pages in two-up mode, and preview of integrated bitmap graphics. Suppliers: ArborText, Inc.

HP9000/500

DVIBIT (by Stephan Bechtolsheim, Bob Brown, Robert Wells, Jim Schaad, Richard Furuta, Nelson H. F. Beebe, Simon Barnes, Robin Rohlicek).

Supports BBN Bitgraph Terminal. Uses GF, PK, or PXL files. Written in C. Source included. Suppliers: University of Utah.

Preview. Uses PXL, GF, and PK files as well as tuned PostScript fonts (the base set available with PostScript printers). Features include font substitution, page magnification and shrinking, searching for character strings, selection of arbitrary pages, display of pages in two-up mode, and preview of integrated bitmap graphics. Suppliers: ArborText, Inc.

IBM MVS

DVIGDDM. Supports GDDM supported IBM display stations (including IBM 3179, 3192, 3193, and 3279). Uses PXL files. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [1].

Unspecified program. Supports Tektronix 4014 terminal. Suppliers: Università Degli Studi Milan.

IBM PC

cdvi. Supports EGA, CGA, Hercules. Cost: \$175. Suppliers: n^2 Consultants.

CDVI 1.2 (by W.G. Sullivan). Supports VGA, MCGA, EGA, CGA, Hercules Monochrome, Olivetti. Uses the basic 16 plain TeX fonts in an internal format (they are part of the program). Cannot preview documents that contain fonts other than those 16. Suppliers: DECUS TeX Collection, Radel.

CDVI 2.02. Supports CGA, EGA, VGA, MCGA, Hercules, Olivetti-ATT or Toshiba 3100. Uses a limited set of 19 CM and 5 L^ATeX fonts built into the program for efficiency's sake. Uses font substitution to display other fonts. Fits in 150K of disk space. Note that there are separate programs for each display type which must be purchased separately. Cost: \$35. Volume discounts available. Suppliers: SullivanSFT.

DVIEW. Supports CGA, EGA, VGA, [Hercules]. Uses PXL files. Hercules previewing is done through the SIMCGA program which is also included. Suppliers: DECUS TeX Collection, Radel.

dvimswin (by Doug McDonald). Supports Microsoft Windows. Suppliers: FTP (wsmr-simtel20.army.mil).

DVISCR (by Eberhard Mattes). Supports CGA, EGA, VGA, Hercules. Uses PK or PXL files. Supports VF files. Suppliers: Aston, FTP (rusmv1.rus.uni-stuttgart.de), FTP (terminator.cc.umich.edu), FTP (uk.ac.aston.tex), Radel.

DVIVGA 2.10 (by Doug McDonald from the Beebe drivers). Supports VGA. Uses GF, PK, or PXL files. Diff files from the Beebe driver source are supplied in lieu of the original C code. An executable is also

included. Suppliers: Channel 1 BBS, DECUS TeX Collection, FTP (wsmr-simtel20.army.mil), Radel.

DVIVIK (by Eberhard Mattes). Supports Viking I. Uses PK or PXL files. Supports VF files. Suppliers: Aston, FTP (rusmv1.rus.uni-stuttgart.de), FTP (terminator.cc.umich.edu), FTP (uk.ac.aston.tex), Radel.

Maxview. Supports IBM EGA (mono or color), CGA, VGA, Hercules Graphics Card, Wyse WY/700, Genius VHR Full Page Display, AT&T 6300. Uses fonts from the laser printer driver in PK or PXL format to display text. Magnification may be set on entry. Suppliers: Aurion Tecnologia, Personal TeX.

Preview. Supports IBM EGA (mono or color), MCGA, VGA, Hercules Graphics Card, Olivetti Monochrome, Tecmar Graphics Master, Genius VHR Full Page Display, ETAP Neftis Monitor, Toshiba 3100, AT&T 6300. Uses PXL, GF, and PK files as well as tuned PostScript fonts (the base set available with PostScript printers). Features include font substitution, page magnification and shrinking, searching for character strings, selection of arbitrary pages, display of pages in two-up mode, and preview of integrated bitmap graphics. Cost: \$149. Suppliers: ArborText, Inc., TeX Users Group.

PTIVIEW. Uses GF, PK, and PXL files. On the fly magnification, on the fly inclusion of DVI files, font substitution, and 256 character fonts are supported. Cost: \$149. Suppliers: Personal TeX.

TeXView 2.06 (by Laurie Benfield from the Beebe drivers). Supports Hercules. Uses GF, PK, or PXL files at 300dpi. The DVI file is first converted into a graphics image by DVIHERC then viewed by TeXView. Suppliers: Radel.

IBM PC/RT

Texx (by Dirk Grunwald). Supports X-11 Windows System. Uses PK, GF, and PXL files. The high resolution fonts used by laser printer drivers are used and shrunk to the screen resolution. The window size may be changed for closeups of the page. Two pages may be viewed simultaneously. Suppliers: FTP (cs.uiuc.edu).

IBM VM/CMS

DVI3279 (by Dr. Georg Bayer). Supports IBM 3179g and 3279 GDDM-driven graphics terminals. Uses PXL files at 120dpi. Written in WEB. Source and executables are included. Displays page either in 8 parts at natural size or 3 parts compressed (with a loss of readability). This driver is on CMS TeX tapes created after 3/88. Suppliers: Stanford CMS distribution tape, Technische Universität Braunschweig, Washington State University.

DVI82 (by Yossie Silverman). Supports IBM 3279, 3179-G terminals. Uses PXL files. Allows inclusion of raster files. Written in assembly language. Source is included. Suppliers: Weizmann Institute.

DVIGDDM. Supports GDDM supported IBM display stations (including IBM 3179, 3192, 3193, and 3279). Uses PXL files. Suppliers: Gesellschaft für Mathematik und Datenverarbeitung [1].

DVIview (by Don Hosek). Supports VT640-compatible terminals and Tektronix-compatible terminals connected through a Series-1/7171 protocol converter, IBM 3179g and 3279 GDDM-driven graphics terminals. Uses PK files. Allows resizing of preview "window" on the page and box outlines of characters for a quick view of page layout. Written in WEB. Source and executables are included. The previewer may be obtained by sending a blank tape and a check or money order for \$30 to cover duplication costs to Don Hosek. Suppliers: Quixote.

DVIBIT (by Stephan Bechtolsheim, Bob Brown, Robert Wells, Jim Schaad, Richard Furuta, Nelson H. F. Beebe, Simon Barnes, Robin Rohlicek). Supports BBN Bitgraph Terminal. Uses GF, PK, or PXL files. Suppliers: University of Utah.

Sun Workstation

Preview. Uses PXL, GF, and PK files as well as tuned PostScript fonts (the base set available with PostScript printers). Features include font substitution, page magnification and shrinking, searching for character strings, selection of arbitrary pages, display of pages in two-up mode, and preview of integrated bitmap graphics. Cost: \$500. Suppliers: ArborText, Inc.

TeXsun (by Dirk Grunwald). Supports Sunview Window System. Uses PK, GF, and PXL files. The high resolution fonts used by laser printer drivers are used and shrunk to the screen resolution. The window size may be changed for closeups of the page. Two pages may be viewed simultaneously. Suppliers: FTP (cs.uiuc.edu).

Texx (by Dirk Grunwald). Supports X-11 Windows System. Uses PK, GF, and PXL files. The high resolution fonts used by laser printer drivers are used and shrunk to the screen resolution. The window size may be changed for closeups of the page. Two pages may be viewed simultaneously. Suppliers: FTP (cs.uiuc.edu).

Unspecified program. Suppliers: University of California, Berkeley.

Unspecified program. Suppliers: University of California, Irvine.

Unix

DVIBIT (by Stephan Bechtolsheim, Bob Brown, Robert Wells, Jim Schaad, Richard Furuta, Nelson H. F. Beebe, Simon Barnes, Robin Rohlicek). Supports BBN Bitgraph Terminal. Uses GF, PK, or PXL files. Written in C. Source included. Suppliers: University of Utah.

DVIDMD (by Lou Salkind; portions adapted from Chris Torek's *ctex* package). Supports DMD 5620. Uses 118dpi fonts in GF, PK or PXL format. The program consists of two parts: a program that runs on the host computer and a program that is downloaded to the terminal. TPIC output is supported. The DMD terminal may be used in either window (MPX) or standalone mode. Suppliers: FTP (nyu.edu), Unix TeX distribution.

GTEX. Supports Tektronix, X11, Sun CGI. Uses PK files. This driver is part of a CGM interpreter package and shares output drivers with that package. Suppliers: FTP (casce.psc.edu).

SeeTeX 2.15 (by Dirk Grunwald). Supports X11. Supports display PostScript under DECwindows. Suppliers: FTP (expo.lcs.mit.edu), FTP (foobar.colorado.edu).

VAX/VMS

DVIBIT (by Stephan Bechtolsheim, Bob Brown, Robert Wells, Jim Schaad, Richard Furuta, Nelson H. F. Beebe, Simon Barnes, Robin Rohlicek). Supports BBN Bitgraph Terminal. Uses GF, PK, or PXL files. Written in C. Source included. Suppliers: University of Utah.

DVIOUT (by Scott Campbell). Supports Tektronix 4014. Uses GF, PK, and PXL files. Allows landscape printing, inclusion of MacDraw bitmaps, inclusion of Tektronix plot files, drawing of line, arc, point, and filled polygons through `\special` commands, and TeX-X_{ET} support. Written in C and Macro-32. Suppliers: DECUS TeX Collection, FTP (ymir.claremont.edu).

DVItoVDU (by Andrew Trevorrow). Supports AED 512, ANSI-compatible, DEC ReGIS, DEC VT100, DEC VT220, Tektronix 4014, Visual 500, 550. Uses PK or PXL files at output device resolution. Written in Modula 2. Source included. Suppliers: Aston, DECUS TeX Collection, FTP (uk.ac.aston.tex), FTP (ymir.claremont.edu), INFN/CNAF, Northlake Software.

DVIVIEW (by Peter Scott). Supports Tektronix, Pericom, Navplot, VT100, VT220, RAMTEK. Uses modified Hershey fonts for fast previewing. Suppliers: JPL.

GTEX. Supports Tektronix, GPX/UIS. Uses PK files. This driver is part of a CGM interpreter package and shares output drivers with that package. Suppliers: FTP (b.psc.edu).

PreTeXt. Supports Talaris T7600. The T7600 terminal has 28 resident CM fonts for previewing. Cost: \$750. Suppliers: Talaris.

Preview. Uses PXL, GF, and PK files as well as tuned PostScript fonts (the base set available with PostScript printers). Features include font substitution, page magnification and shrinking, searching for character strings, selection of arbitrary pages, display of pages in two-up mode, and preview of integrated bitmap graphics. Runs under DEC-Windows. Suppliers: ArborText, Inc.

TP. Supports Tektronix 4010/4014 compatible. Uses special "stick-figure" fonts to display TeX output. Written in Fortran. Source included. Distributed on your choice of IBM 5.25" disk, IBM 3.5" disk, Mac 3.5" disk, or TK50 cartridge (enclose your own or add \$40 to order). Cost: \$185. Suppliers: TPSoftware.

TXMAPPER, TXREGIS. Supports DEC ReGIS. Uses PXL files. Written in Fortran. Source included. Suppliers: Aston, DECUS TeX Collection, FTP (uk.ac.aston.tex), INFN/CNAF.

Vaxstation/Unix

Texx (by Dirk Grunwald). Supports X-11 Windows System. Uses PK, GF, and PXL files. The high resolution fonts used by laser printer drivers are used and shrunk to the screen resolution. The window size may be changed for closeups of the page. Two pages may be viewed simultaneously. This implementation may encounter some byte order problems. Suppliers: FTP (cs.uiuc.edu).

Vaxstation/VMS

DVIDIS (by Jerry Leichter). Supports GPX(UIS). Uses PK files at 150dpi (optional) and 300dpi subsampled to screen resolution. Distributed as executables only (source available only on special request). Suppliers: DECUS TeX Collection, Yale University.

Preview. Supports DECwindows. Uses PXL, GF, and PK files as well as tuned PostScript fonts (the base set available with PostScript printers). Features include font substitution, page magnification and shrinking, searching for character strings, selection of arbitrary pages, display of pages in two-up mode, and preview of integrated bitmap graphics. Cost: \$500. Suppliers: ArborText, Inc.

Preview (by Randy Buckland). Supports GPX(UIS). Uses PK files at 78dpi. Allows magnification of preview window by TeX magsteps. Includes Font, a program for viewing fonts on the VAXstation display. Written in Ada. Source included. Suppliers: Research Triangle Institute.

T2/View. Supports DECwindows. Suppliers: Northlake Software.

TP. Supports GPX(UIS). Uses PK or PXL files at output driver resolution. Written in Fortran. Source included. Distributed on your choice of IBM 5.25" disk, IBM 3.5" disk, Mac 3.5" disk, or TK50 cartridge (enclose your own or add \$40 to order). Cost: \$185. Suppliers: TPSoftware.

TXUIS. Supports GPX(UIS). Uses PXL files. Written in Fortran. Source included. Suppliers: INFN/CNAF.

XDVI. Supports DECwindows. Suppliers: DECUS TeX Collection, FTP (ymir.claremont.edu).

Unspecified program. Suppliers: Philips Kommunikations Industrie AG.

Supplier Information

- **Aarhus University**

- **ArborText, Inc.**

Contact: Sales Department. 535 W. William Street, Suite 300, Ann Arbor, MI 48103.
Internet: sales@arbortext.com. 313-996-3566.

- **Aston**

Contact: Peter Abbott.
Janet: abbottp@uk.ac.aston. Computing Service, Aston Triangle, Birmingham B4 7ET. A complete copy of the Aston archive is available in VMS BACKUP format on two 2400' tapes at 6250bpi. To receive it send two blank tapes and return postage. The Unix TeX distribution may also be obtained in exchange for one 2400' tape and return postage.

- **Aurion Tecnología**

Contact: Armando Jinich. Arquímedes #3, 501, Polanco 11570, México, D.F. 905-545-7315.
Telex: 171314 NACOME.

- **Bechtolsheim**

Contact: Stephen v. Bechtolsheim. 2119 Old Oak Drive, West Lafayette, IN 47906. Send \$80 (\$110 outside the continental U.S.) and you will receive a Sun cartridge plus complete documentation.

- **Bochum**

Contact: Norbert Schwartz. Ruhr Universität Bochum. 49 234 700-4014.

- **Brigham Young University**

Contact: Paul Malquist.
Internet: malquistp@yvax.byu.edu.

- **Canon**

- **Carleton University**

Contact: Neal Holtz. 613-231-7145.

- **Channel 1 BBS**

Modem: 617-354-8873.

- **Clark**
Contact: James Clark. 30 Peel Street, London W8 7PD England. UUCP: jjc@jcclark.uucp.
- **Columbia University**
Contact: Frank da Cruz. Center for Computing Activities, Columbia University, 612 West 115th Street, New York, NY 10025. 212-280-5126.
- **COS Information**
Contact: Gilbert Gingras. 5647 rue Ferrier, Montreal H4P 1N1, Quebec Canada. 514-738-2191.
- **CUBE Software**
Contact: Warren W. Wolfe. 3002 Cadboro Bay Road, Victoria V8R 5J9, B.C. Canada. 604-380-4592.
- **DECUS T_EX Collection**
Library Order Processing, 219 Boston Post Road, BPO2, Marlboro, MA 01752. 508-480-3418, 508-480-3659, 508-480-3446.
- **Digital Equipment Corporation**
Contact: John Sauter. 801128 Bates Road, Merrimack, NH 03054. Internet: Sauter%Dssdev.DEC@Decwrl.DEC.com. 603-881-2301.
- **Ecole Normale Superieure**
Contact: Chantal Durand. Centre de Calcul, Ecole Normale Superieure, 45 rue d'Ulm, 75005 Paris, France.
- **FTP <b.psc.edu>**
Contact: Anjana Kar. Internet: kar@b.psc.edu. The GTEX files for VMS are located in TEX\$ROOT: [GPLLOT].
- **FTP <casce.psc.edu>**
Contact: Anjana Kar. Internet: kar@b.psc.edu.
- **FTP <cs.purdue.edu>**
Contact: Stephan Bechtolsheim. pub/svb/TeXPS/TEXPS-3.0.tar.Z contains the dvitps driver.
- **FTP <cs.uiuc.edu>**
Contact: Dirk Grunwald. Internet: grunwald@m.cs.uiuc.edu. pub/TeX/uiuctex2.0.tar.Z contains Grunwald's drivers.
- **FTP <csseq.tamu.edu>**
- **FTP <ctrsci.utah.edu>**
Contact: Nelson H. F. Beebe. 801-581-5254. Internet: Beebe@Science.Utah.edu.
- **FTP <expo.lcs.mit.edu>**
- **FTP <foobar.colorado.edu>**
- **FTP <giza.cis.ohio-state.edu>**
pub/oztex/other contains DVIM72-Mac.
- **FTP <june.cs.washington.edu>**
Contact: Elisabet Tachikawa. 206-543-6259. Internet: elisabet@max.u.washington.edu. tex/dviapollo.tar.Z (DVIAPOLLO in compressed tar file).
- **FTP <nyu.edu>**
Contact: Lou Salkind. Internet: Salkind@Acf8.NYU.edu. pub/dmd.tar.Z (DVIDMD in compressed tar file).
- **FTP <orc.olivetti.com>**
pub/tmp/dvi2lj1.11.tar.Z contains dvi2lj.
- **FTP <rusmv1.rus.uni-stuttgart.de>**
Eberhard Mattes' drivers are distributed with emT_EX in soft/tex/emtex.
- **FTP <science.utah.edu>**
Contact: Nelson H. F. Beebe. (801) 581-5254. Internet: Beebe@science.utah.edu. ~ftp/pub/tex/pub/dvi/* and ~ftp/pub/tex/pub/dvi/doc/* (Beebe drivers and documentation).
- **FTP <ssyx.ucsc.edu>**
- **FTP <stag.math.lsa.umich.edu>**
Contact: Kevin Coombes. Internet: kevin@math.lsa.umich.edu. pub/kevin/dvi3ps.tar.Z (dvi3ps driver).
- **FTP <terminator.cc.umich.edu>**
The Atari ST DeskJet driver is in /atari/tex. Eberhard Mattes' drivers are distributed with the emT_EX package in msdos/text-mgmt/TeX/emtex.
- **FTP <tut.cis.ohio-state.edu>**
The 24-pin Epson driver for the Amiga is in pub/amigo.
- **FTP <uk.ac.aston.tex>**
Contact: Peter Abbott. Janet: abbott@uk.ac.aston. Accessible to JANET users only. Use Username PUBLIC, Password PUBLIC. For information on Mail access send a mail message with 3 lines containing (1) three hyphens, (2) your return mail address, and (3) the word HELP, to texserver@uk.ac.aston. Gustav Neumann's DVI2XX is available in [TEX-ARCHIVE.DRIVERS.NEUMANN] as NEUMANN.BOO. Nelson Beebe's drivers are in [TEX-ARCHIVE.DRIVERS.BEEBE].

- **FTP** (`wsmr-simtel20.army.mil`)
- **FTP** (`yimir.claremont.edu`)
Contact: Don Hosek.
Internet: `dhosek@yimir.claremont.edu`.
Bitnet: `dhosek@hmcvax.bitnet`. Get the file `[anonymous.tex]00readme.txt` before attempting to retrieve files. Text files from this site are also available by requesting files from `mailserv@yimir.claremont.edu`. Send the command `help` to that address for more details. `[anonymous.tex.drivers.beebe2.10...]` contains the Beebe drivers.
`[anonymous.tex.drivers.beebe_extensions]` contains extensions to the Beebe driver family.
- **GA Technologies**
- **Gesellschaft für Mathematik und Datenverarbeitung [1]**
Contact: Ferdinand Hommes. GMD Z1.BN, Postfach 1240, D-5205 St. Augustin 1, Federal Republic of Germany. Bitnet: `GRZTEX@DBNGMD21`. +49-228-8199621.
- **Gesellschaft für Mathematik und Datenverarbeitung [2]**
Contact: Dr. Wolfgang Appelt. Schloss Birlinghoven - PF 1240, D-5202 St. Augustin 1, Federal Republic of Germany.
UUCP: `seismo!unido!gmdzi!zi.gmd.dbp.de!appelt`.
- **Hewlett-Packard**
Contact: Stuart Beatty. Hewlett-Packard Company, 3404 E. Harmony Rd., Ft. Collins, CO 80525. 303-229-2067.
- **INFN/CNAF**
Contact: Maria Luisa Luvisetto. Via Mazzini 2, 40138 Bologna, Italy. 51-498286. Bitnet: `Miltex@Iboinfn`.
DECnet: `<39947::luvisetto>`. The files are available only via DECnet/Span; for more information on this, send mail to the DECnet address: `<39947::luvisetto>`. No tape distribution from INFN/CNAF is available.
- **Intergraph**
Contact: Mike Cunningham. One Madison Industrial Park, MS HQ1200, Huntsville, AL 35807. 205-772-2000.
- **JDJ Wordware**
Contact: John D. Johnson. JDJ Wordware, P.O. Box 354, Cupertino, CA 95015. 415-965-3245.
Internet: `M.John@Sierra.Stanford.edu`.
- **JPL**
Contact: Peter Scott.
Internet: `pjs%grouch@jpl-mil.jpl.nasa.gov`. 818-354-2246.
- **Kinch Computing**
501 South Meadow Street, Ithaca, NY 14850. 607-273-0222. FAX: 607-273-0484.
- **LaserPrint**
P.O. Box 35, D-6101 Fränkisch Crumbach, Federal Republic of Germany. +49-6164-4044.
- **Ling**
Contact: Fuyun Ling. 202 Chestnut Ave., Jamaica Plain, MA 02130.
Internet: `lingfuyun@nuhub.acs.northeastern.edu`.
- **Long**
Contact: Jeff Long.
Internet: `jlong@blackbird.afit.af.mil`.
Mr. Long is only willing to distribute minimal files to those who can't FTP and who already have the bulk of the Beebe Driver package.
- **Louisiana State University**
Contact: Neal Stoltzfus. Department of Mathematics, Louisiana State University, 382 Lockett Hall, Baton Rouge, LA 70803. 504-388-1570.
- **Massachusetts Institute of Technology**
Contact: Chris Lindblad. MIT AI Laboratory, Room 733, 545 Technology Square, Cambridge, MA 12138. Internet: `Cjl@Reagan.ai.Mit.edu`.
- **Max-Planck-Institut für Aeronomie**
Contact: Helmut Kopka. Max-Planck-Institut für Aeronomie, Katlenburg-Landau, D3411, Federal Republic of Germany. 49-556-41451.
Bitnet: `Mio401@Dgogwd01`.
- **n² Consultants**
Contact: Norman Naugle. P. O. Box 2736, College Station, TX 77841. 409-845-3104.
Internet: `Naugle@Ee.Tamu.edu`.
- **Neumann**
Contact: Gustav Neumann.
Bitnet: `Neumann@Awiwuw11`.
- **Northlake Software**
Contact: David Kellerman. 812 SW Washington, Portland, OR 97205. 503-228-3383.
UUCP: `nls!davek`.
- **Océ-Nederland**
Contact: Jan van Knippenberg. Office Automation, P.O. Box 101, 5900 MA VENLO, The Netherlands. 0-77-592222.
- **OCLC**
Contact: Tom Hickey. 6565 Frantz Road, Dublin, OH 43017. 616-764-6075.

- **Ohio State University**
Contact: Ms. Marty Marlatt. Ohio State University, Department of Computer and Information Science, 2036 Neil Avenue, Columbus, OH 43210. The drivers are distributed on either ANSI or TOPS-20 DUMPER tapes, with hardcopy documentation. There is a \$125 service charge (payable to Ohio State University) to cover postage, handling, photocopying, etc.
- **Oxford [1]**
Contact: Paul Leyland.
Janet: `pcl@robots.ox.ac.uk`.
- **Oxford [2]**
Contact: Dr. P.S. Aspinwall. Oxford University Department of Theoretical Physics, Keble Road, Oxford, OX1 3RH, United Kingdom. 44-865-273954. Internet: `aspin@vax.oxford.ac.uk`.
Janet: `aspin@uk.ac.oxford.vax`.
- **Personal T_EX**
Contact: Lance Carnes. 12 Madrona Street, Mill Valley, CA 94941. 415-388-8853.
Telex: 510-601-0672.
- **Philips Kommunikations Industrie AG**
TEKADE Fernmeldeanlagen, Attn. Dr. J. Lenzer, Thurn-und-Taxis-Str., D-8500 Nürnberg, Federal Republic Germany. +49-911-5262019.
- **Prime distribution tape**
Contact: John M. Crawford. Computing Services Center, College of Business, Ohio State University, 1775 College Road, Columbus, OH 43210. 614-292-1741. Bitnet: `Craw4d@ohstvm`.
Internet: `Crawford-j@OSU-20.ircc.Ohio-State.edu`.
- **Procyon Informatics**
Contact: John F. Roden. Glendenning House, 7-8 Wicklow St., Dublin 2, Ireland. 353-1-791323.
- **Quixote**
Contact: Don Hosek. 440F Grinnell, Claremont, CA 91711. Bitnet: `DHOSEK@hmcvax`.
- **Radel**
Contact: Jon Radel. P.O. Box 2276, Reston, VA 22090. Software is distributed on 5.25" 360K floppy disks. For floppies sent with a return mailer, there is a charge of \$1.50/floppy U.S. orders, \$2/floppy elsewhere. For orders where floppies are supplied by Jon Radel, there is a charge of \$5/floppy for U.S., Mexican and Canadian orders, \$6/floppy elsewhere. 3.5" 720K disks are also available for the cost of any two floppies each.
- **Radical Eye Software**
Contact: Tom Rokicki. Box 2081, Stanford, CA 94309. 415-326-5312.
- **Research Triangle Institute**
Contact: Randy Buckland.
Internet: `rcb@rti.rti.org`. The program is available in the `comp.sources.misc` archives on Internet and Usenet.
- **Scan Laser**
Contact: John Escott. 6 Churchill Close, Hartley Wintney, Nr Basingstoke, Hants RG27 2RA, England. +44-1-638-0536.
- **Science Applications**
San Diego, CA. 619-58-2616.
- **Stanford CMS distribution tape**
- **Stanford DEC-20 distribution tape**
- **Stanford VMS distribution tape**
Contact: Maria Code. Data Processing Services, 1371 Sydney Drive, Sunnyvale, CA 94087.
- **Stichting Acad Rechenzentrum Amsterdam**
Contact: Han Noot. Stichting Math Centrum, Tweede Boerhaavestraat 49, 1091 AL Amsterdam, The Netherlands.
- **SullivanSFT**
P. O. Box 292431, Lewisville, TX 75029.
- **Sun**
- **Systemhaus für Elektronisches Publizieren**
Contact: Robert Schöninger. Arndtstrasse 12, 5000 Köln, Federal Republic of Germany.
- **Talaris**
Contact: Sam Hassabo. 619-587-0787.
- **Technical Research Center of Finland**
Contact: Tor Lillqvist. VTT/ATK, Lehtisaarentie 2, SF-00340 Helsinki, Finland. +358-04566132.
Bitnet: `Tnl@Fingate`.
- **Technische Hochschule Darmstadt**
Contact: Klaus Guntermann. Fachbereich Informatik, Insitut für Theoretische Informatik, Alexanderstrasse 24, D-6100 Darmstadt, Federal Republic of Germany. Bitnet: `XITIKGUN@DDATHD21`.
- **Technische Universität Braunschweig**
Contact: Georg Bayer. Bitnet: `C0030001@Dbstu1`.
- **T_EX Users Group**
P.O. Box 9506, Providence, RI 02940-9506. 401-751-7760. Internet: `tug@math.ams.com`.
- **Texas A&M [1]**
Contact: Bart Childs. Department of Computer Science, Texas A&M University, College Station, TX 77843-3112. 409-845-5470.
Internet: `childs@cs.tamu.edu`.

- **Texas A&M [2]**
Contact: Ken Marsh. Thermodynamics Research Center, Texas A&M University, College Station, TX 77843. 409-845-4995. Bitnet: KMarsh@Tamm1.
- **Texas A&M [3]**
Contact: Thomas Reid. Computing Services Center, Texas A&M University, College Station, TX 77843. 409-845-8459. Bitnet: X066TR@TAMVM1.
- **TeXsys**
Contact: Joachim Schrod. Kranichweg 1, D-6074 Rödermark, Federal Republic of Germany. +49-6074-1617.
- **Tools GmbH Bonn**
Contact: Edgar Fuß. Kaiserstraße 48, 5300 Bonn, Federal Republic of Germany. UUCP: ...unido!bnu!fuss.
- **The Toolsmith**
P.O. Box 5000, Davis, CA 95617. 916-753-5040.
- **TPSoftware**
Contact: Harold T. Stokes. P.O. Box 922, Provo, UT 84603-0922.
- **Università Degli Studi Milan**
Contact: Dario Lucarella. 02/23.62.441.
- **Universität des Saarlandes**
Contact: Prof. Dr. Reinhard Wilhelm. FB 10 Informatik, Im Stadtwald 15, D-6600 Saarbrücken, Federal Republic of Germany. UUCP: wilhelm@sbsvax.UUCP.
- **University of British Columbia**
Contact: Afton Cayford. Mathematics - University of British Columbia, 121-1984 Mathematics Road, Vancouver V6T 1Y4, British Columbia, Canada. 604-228-3045.
- **University of California, Berkeley**
Contact: Michael Harrison. Internet: vortex@berkeley.edu.
- **University of California, Irvine**
Contact: Tim Morgan. Internet: morgan@uci.edu.
- **University of Heidelberg**
Contact: Joachim Lammarsch. Bitnet: RZ92@DHDURZ1.
- **University of Kansas**
Contact: Edwin Bell. Bitnet: Bell@Ukanvax. SPAN: Bell@Kuphsx. Internet: Bell%Kuphsx.Span@Star.Stanford.edu. Department of Physics and Astronomy, University of Kansas, Lawrence, KS 66045. 913-864-3610.
- **University of Köln**
Contact: Jochen Roderburg. Bitnet: A0045@Dk0rrzk0. Rechenzentrum, University of Köln, D5000 Köln 41, Federal Republic of Germany. 02211-/478-5372.
- **University of Maryland**
Contact: Chris Torek. Computer Science Department, University of Maryland, College Park, MD 20742. 301-454-7690. Internet: Chris@Cs.Umd.edu. The Imagen driver may be obtained via anonymous FTP from a.cs.uiuc.edu in the directory pub/TeX, file iptex.tar.Z or from mimsy.umd.edu in the directory tex, file ctex.
- **University of Sheffield**
Contact: Ewart North. Data Processing Unit, University of Sheffield, Western Bank, Sheffield S10 2TN, England. (0742)-78555 ext. 4307.
- **University of Sydney**
Contact: Alec Dunn. School of Electrical Engineering, University of Sydney, NSW 2006, Australia. 02-692-2014. ACSnet: alecd@facet.ee.su.oz. Internet: alecd%facet.ee.su.oz@Seismo.Css.gov.
- **University of Utah**
Contact: Nelson H. F. Beebe. Center for Scientific Computing, Department of Mathematics, 220 South Physics, University of Utah, Salt Lake City, UT 84112. 801-581-5254. Internet: Beebe@science.utah.edu. All of the Beebe drivers are distributed together. They are available on 1600bpi 9-track tape in VAX/VMS BACKUP format, Unix tar format, and ANSI D-format. Send US\$100 for a copy. IBM PC floppies are available from Personal TeX or Jon Radel. The programs are available for anonymous FTP from science.utah.edu on the Internet; information is in the file ~ftp/00readme.txt. A VAX/VMS binary distribution is available for anonymous FTP (password guest) from ctrsci.utah.edu. The file 00readme.txt in the login directory gives details. On JANET, the programs may be obtained from the directory aston.tex::[public.texdvi210]. On DECnet, they are available from the DECnet file repository; for more information send mail to the DECnet address <39937::luvisetto>. The drivers are available from Listserv on EARN to European Bitnet users. Sending the command GET DRIVER FILELIST (in an interactive message, or as the first line of a mail message) to LISTSERV@DHDURZ1. Files are obtained with the command GET filename filetype.
- **University of Washington**
Contact: Elisabet Tachikawa. Northwest Computer Support Group, University of Washington, Mail

Stop DR-10, Seattle, WA 98195. 206-543-6259.
 Internet: elisabet@max.u.washington.edu.

• **University of Wisconsin**

Contact: Ralph Stromquist. 1210 W. Dayton Street,
 Madison, WI 53706. 608-262-8821.

• **Unix distribution tape**

Contact: Elisabet Tachikawa. Northwest Computer Support Group, University of Washington, Mail Stop DR-10, Seattle, WA 98195. 206-543-6259. Internet: elisabet@max.u.washington.edu. The Unix distribution tape may be obtained from the Northwest Computer Support Group for \$100 (\$110 for foreign sites). It is available either as Unix tar blocked 20, 1600 bpi, or in 1/4" streamer cartridges for the Sun workstation. The DEC-20 program is available on request. Checks should be made payable to the University of Washington.

• **van Oostrum**

Contact: Piet van Oostrum.
 Internet: piet@cs.ruu.nl.
 UUCP: piet@ruuinfvax.UUCP.

• **Washington State University**

Contact: Dean Guenther. Bitnet: GUENTHER@WSUVM1.
 Computing Service Center, Washington State University, Pullman, WA 99164-1220. 509-335-0411.

• **Washington University**

Contact: Stanley Sawyer. Department of Mathematics, Campus Box 1146, St. Louis, MO 63130. 314-889-6703.

• **Weizmann Insititute**

Contact: Malka Cymbalista. Computer Center, Weizmann Institute of Science, Rehovot 76100, Israel. 08-482443. Bitnet: Vumalki@Weizmann.

• **Xerox**

Contact: Margot Nelligan. Xerox Printing Systems Division, 880 Apollo Street, El Segundo, CA 90245. 213-333-6058.

• **XOrbit**

P.O. Box 1345, D-8172 Lenggries, Federal Republic of Germany. +49-8042-8081.

• **Yale University**

Contact: Jerry Leichter. Bitnet: Leichter@Yalevms.
 Internet: Leichter-jerry@cs.yale.edu. Available for anonymous FTP from [venus.ycc.yale.edu](ftp://venus.ycc.yale.edu). Log in as anonymous and do a CD [.DVIDIS]. That directory contains the three required files needed to run the previewer. The image *must* be transferred using BINARY mode.

Typesetters

	CDC Cyber	HP3000	IBM MVS	IBM PC	IBM VM/ CMS	Siemens BS2000	Sperry 1100	UNIX	VAX VMS
Allied Linotype CRTronic									558
Allied Linotype L100, L300P				558					
Allied Linotype L202				558					558
Autologic APS-5, Micro-5				558				558	558
Compugraphic 8400		558		558				558	558
Compugraphic 8600	558			558	558		558	558	559
Compugraphic 8800				559				559	
Harris 7500								559	
Hell Digiset			559			559			

Low-Resolution Printers — Laser Xerographic, Electro-Erosion Printers

	Amdahl (MTS)	Amiga	Atari ST	CDC Cyber	Data General MV	DEC-20	HP1000	HP9000 200	IBM MVS	IBM PC VM/ CMS	Prime	Siemens BS2000	Sym- bolics Lisp	UNIX	VAX VMS
Agfa P400									545	545		546		546	546
Canon LBP-A2, LBP-8			546			546				546				546	546
Cordata LP300									546						
DEC LN03, LN03+			546			546			546					546	546
Golden Dawn Golden Laser 100			547			547			547					547	547
HP 2680							547								
HP 2688A							547	547							
HP LaserJet, LaserJet Plus, II, IID, IIP, III, 2000		547	547			547	547		547		548			548	548
IBM 38xx, 4250, Sherpa								548	548	548				548	
Imagen									549	549				549	549
Kyocera F-10xx, F-20xx			549							549				549	549
Océ 6750															549
Olympia Elsa										549					
PostScript printers		550	550			550			550	550	550			550	551
QMS Kiss, Smartwriter															
QMS Lasergrafix	551	551			551			551	551	551	551	552		552	552
Talaris															
Xerox 2700II, 3700, 4045				552		552									
Xerox 8700, 8790, 9700, 9790, 4050	552							553		553				553	553

Low-Resolution Printers — Impact and Electrostatic Printers

	Acorn	Amiga	Apple Mac- intosh	Atari ST	Cadmus 9200	Data General MV	DEC-20	HP1000	HP3000	IBM MVS	IBM PC VM/ CMS	Prime	UNIX	VAX VMS
Apple ImageWriter	553	553	553	553			553				553	553		553
Benson 9424											554			
C. Itoh 8510A											554			
Citizen 120-D		554												
DEC LA75, LP100	554			554			554				554	554	554	554
Epson FX/MX/JX/RX	554	554		554			554	554	554		555	555	555	555
Epson LQ, NEC P6/P7		555		555							555			
Fujitsu					555									
GE 3000													555	
HP DeskJet		555		555							555			
HP InkJet		555												
MPI Sprinter	556			556			556				556	556	556	556
NDK Printstar														
Okidata	556	556		556			556				556	556	556	556
Printtronix	556			557		557	557				557	557	557	557
Texas Instruments 855											557			
Toshiba	557			557		557	557				557	557	557	557
Varian														557
Versatec										557			557	