

Drivers should be modified to notice rules that have lisp vertical and horizontal spans and to remember the nonzero dimensions in separate registers. This gives all drivers the necessary information to position themselves correctly and to copy the appropriate data file. We recommend passing the current position (the `\vskip` in item 3) at the top left because it agrees with the coordinate system of dvi files in some sense. We also understand that many would prefer adding two arguments to the `\special's` copy, the height and depth. If this is done, we strongly recommend it be done in points only. This should be a decision by the standards committee.

The following is an outline of how we would create graphics and incorporate them in \TeX documents:

1. Create a GKS file by use of utilities or applications that use GKS. We use CEO-DB to create a graphics image.
2. Have GKS output a `cgm` file. In our case with CEO-DB we would create a `cgm` file from the CEO environment.
3. Run `cgmsize` to create the appropriate file needed by \TeX using `\figinput`.
4. Have a utility that creates the appropriate printer file.
5. We also have to run a utility that properly prepares the graphics output file for the desired printer. This utility will strip off characters at the beginning and end of the file, and reset the printer for \TeX .
6. Run \TeX .

After outlining this prototype system, we realized that the format would be appropriate for dvi inclusion as well. We might want to create a figure or table using \LaTeX , $\Pi\TeX$, T2D4, or other macro package that uses lots of memory. A `dvsiz` utility could produce an appropriate size file. A `dvimerge` file could then be run when needed to produce a "complete" dvi file.

We are forwarding this to Robert McGaffey and his group working on printer standards. We will be pleased to furnish this and the appropriate sources to all interested parties. Please respond with comments to the first author and copy Mr. McGaffey.

Output Devices

\TeX Output Devices

Don Hosek

The device tables on the following pages list all the \TeX device drivers currently known to TUG. Some of the drivers indicated in the tables are considered proprietary. Most are not on the standard distribution tapes; those drivers which are on the distribution tapes are indicated in the listing of sources below. To obtain information regarding an interface, if it is supposed to be included in a standard distribution, first try the appropriate site coordinator or distributor; otherwise request information directly from the sites listed.

The codes used in the charts are interpreted below, with a person's name given for a site when that information could be obtained and verified. If a contact's name appears in the current TUG membership list, only a phone number or network address is given. If the contact is not a current TUG member, the full address and its source are shown. When information on the drivers is available, it is included below.

Screen previewers for multi-user computers are listed in the section entitled "Screen Previewers". If a source has been listed previously under "Sources", then a reference is made to that section for names of contacts.

Corrections, updates, and new information for the list are welcome; send them to Don Hosek:
 Bitnet U33297@Uicvm,
 Internet U33297@Uicvm.Uic.Edu
 (postal address, page 3).

Sources

ACC Advanced Computer Communications,
 Diane Cast, 720 Santa Barbara Street, Santa Barbara,
 CA 93101, 805-963-9431 (DECUS, May '85)

Adelaide Adelaide University, Australia

The programs listed under Adelaide have been submitted to the standard distributions for the appropriate computers. The PostScript driver permits inclusion of PostScript files in a \TeX file. The driver is described in *TUGboat*, Vol. 8, No. 1.

AMS American Mathematical Society, Barbara Beeton, 401-272-9500 Internet: `BNB@Math.AMS.com`

Arbor ArborText, Inc., Bruce Baker, 313-996-3566,
 Arpanet: `Bwb@Arbortext.Com`

ArborText's software is proprietary and ranges in price from \$150 to \$3000. The drivers for PostScript

printers, the HP LaserJet Plus, the QMS Lasergrafix, and Imagen printers are part of their DVILASER series. The drivers all support graphics and include other special features such as use of resident fonts or landscape printing when supported by the individual printers.

Printing on the Autologic APS-5 and μ -5 phototypesetters with DVIAPS includes support of Autologic standard library fonts and logo processing.

Aurion Aurion Tecnología SA de CV,
Armando Jinich, Arquímedes #3, 501, Polanco 11570,
México, D.F., 905-545-7315

Bochum Ruhr Universität Bochum,
Norbert Schwarz, 49 234 700-4014

Caltech California Institute of Technology,
Chuck Lane, Bitnet: CEL@CITHEX

Canon Canon Tokyo, Masaaki Nagashima,
(03)758-2111

Carleton Carleton University, Neil Holtz,
613-231-7145

CMU Carnegie-Mellon University, Howard Gayle,
412-578-3042

Columb. Columbia University, Frank da Cruz,
212-280-5126

COS COS Information, Gilbert Gingras,
514-738-2191

DEC Digital Equipment Corporation, John Sauter,
603-881-2301

The LN03 driver is on the VAX/VMS distribution tape.

DECUS DECUS Program Library, Library
Order Processing, 219 Boston Post Road, BPO2,
Marlboro, MA 01752, 508-480-3418, 508-480-3659,
508-480-3446,

The previewer and PostScript driver are combined in a single program, DVIOU. The program uses GF, PK, and PXL files. It 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. There is a charge of \$35 for DECUS members, \$40 for non-members to obtain this program. It is distributed on a 600' 6250 bpi magnetic tape.

ENS Ecole Normale Supérieure, Chantal Durand,
Centre de Calcul, Ecole Normale Supérieure,
45 rue d'Ulm, 75005 Paris, France

GA Tech GA Technologies

GMD1 Gesellschaft für Mathematik und
Datenverarbeitung, Federal Republic of Germany,
Ferdinand Hommes, Bitnet: Grztex@Dbngmd21,
+49 228 8199621

GMD2 Gesellschaft für Mathematik
und Datenverarbeitung, Federal Republic

of Germany, Dr. Wolfgang Appelt,
uucp: unido!gmdzi!zi.gmd.dbp.de!appelt

HP Hewlett-Packard, Stuart Beatty, 303-226-3800

INFN INFN/CNAF, Bologna, Italy, Maria Luisa
Luvisetto, 51-498286, Bitnet: MiLtex@Icineca2

The CNAF device drivers are on the VAX/VMS distribution tape.

Interg'ph Intergraph, Mike Cunningham,
205-772-2000

JDJW JDJ Wordware, John D. Johnson,
415-965-3245, Arpanet: M.John@Sierra.Stanford.Edu

LaserPrint LaserPrint, P.O. Box 35, D-6101
Fränkisch Crumbach, Federal Republic Germany,
+49 6164 4044

The driver supports graphics inclusion in device dependent format. PK font files are used. This program is proprietary. Contact LaserPrint for further information.

LLL Lawrence Livermore Laboratory

LSU Louisiana State University, Neal Stoltzfus,
504-388-1570

Milan1 Università Degli Studi Milan, Italy,
Dario Lucarella, 02/23.62.441

Milan2 Università Degli Studi Milan, Italy,
Giovanni Canzii, 02/23.52.93

MIT Massachusetts Institute of Technology,
Chris Lindblad, MIT AI Laboratory, 617-253-8828

The drivers for Symbolics Lisp machines use the Symbolics Generic Hardcopy interface as a back end, so it should work on any printer that has a driver written for it. The printers listed in the table indicate drivers the program has been tested on.

The UNIX drivers for PostScript and QMS printers both support landscape printing and graphics inclusion via specials.

MPAE Max-Planck-Institut für Aeronomie,
H. Kopka, (49) 556-41451, Bitnet: Mio40L0D606wd01

MPS Micro Publishing Systems, Incorporated,
#300-1120 Hamilton Street, Vancouver, B.C.,
Canada, V6B 2S2, 604-687-0354

The \TeX print laser printer drivers allow landscape printing, collating, odd or even page selection, graphics inclusion, and direct output to the printer. A translation utility for HP soft fonts is included with the HP driver and TFM files for PostScript fonts and a utility for creating TFMs from AFM files are included with the PostScript drivers. The drivers use GF, PK, and PXL files.

The drivers cost \$189 each, \$150 for educational and governmental institutions.

MR Math Reviews, Dan Latterner, 313-996-5266

NLS Northlake Software, David Kellerman,
503-228-3383

The VAX/VMS Imagen driver supports graphics.

Océ Océ Nederland B.V., Marius Broeren,
Division Office Automation, P. O. Box 101,
5900 MA Venlo, The Netherlands, +31.77.76466 x135

OCLC OCLC, Thom Hickey, 6565 Frantz Road,
Dublin, OH 43017, 616-764-6075

OSU1 Ohio State University, John M. Crawford,
614-292-1741, Bitnet: Ts0135@Ohstvm,
Internet: Crawford-j@Ohio-state.Edu

OSU2 Ohio State University, Ms. Marty Marlatt,
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.

Philips Philips Kommunikations Industrie AG,
TEKADE Fernmeldeanlagen, Attn. Dr. J. Lenzer,
Thurn-und-Taxis-Str., D-8500 Nürnberg,
Federal Republic Germany, +49 911 5262019

PPC Princeton Plasma Physics Lab, Charles
Karney, Arpanet: Karney%PPC.MFENET@NMFECC.ARPA

Versatec output from \TeX spool is produced via the NETPLOT program. \TeX spool also produces output for the FR80 camera. Color and graphics primitives are supported through specials.

Procyon Procyon Informatics, Dublin, Ireland,
John Roden, 353-1-791323

PTI Personal \TeX , Inc., Lance Carnes,
415-388-8853

Graphics output is supported on Imagen, PostScript, and QMS printers.

Rad Eye Radical Eye Software, Tom Rokicki,
Box 2081, Stanford, CA 94309, 415-326-5312

RTI Research Triangle Institute, Randy Buckland,
Arpanet: rcb@rti.rti.org

The program is available in the `comp.sources.misc` archives on Arpanet and Usenet.

Saar Universität des Saarlandes, Saarbrücken,
Federal Republic of Germany, Prof. Dr. Reinhard
Wilhelm, uucp: wilhelm@sbsvax.UUCP

SARA Stichting Acad Rechenzentrum Amsterdam,
Han Noot, Stichting Math Centrum,
Tweede Boerhaavestraat 49, 1091 AL Amsterdam
(see *TUGboat*, Vol. 5, No. 1)

Scan Scan Laser, England, John Escott,
+1 638 0536

Sci Ap Science Applications, San Diego, CA,
619-458-2616

SEP Systemhaus für Elektronisches Publizieren,
Robert Schöninger, Arndtstrasse 12, 5000 Köln,
Federal Republic of Germany

DVIP400 uses PXL files. Landscape printing is supported in all versions and graphics inclusion in all

but the IBM PC version. Source is available on request. Cost varies from 300-1848DM.

Stanford Stanford University

The Imagen driver from Stanford is present on most distributions as the file `DVIIMP.WEB`. It provides limited graphics ability.

Sun Sun, Inc.

Sydney University of Sydney, Alec Dunn,
(02) 692 2014, ACSnet: alecd@facet.ee.su.oz

Talaris Talaris, Sam Hassabo, 619-587-0787

All of the Talaris drivers support Textronix graphics. Device-dependent special fonts are used for older printers and all previewers; newer printers use PK fonts.

T A&M1 Texas A&M, Bart Childs, 409-845-5470,
CSnet: Childs@TAMU

Graphics is supported on the Data General drivers for the Printronix, Toshiba, and Versatec on the Data General MV. On the TI PC, graphics is supported on the Printronix and Texas Instruments 855 printers. There are also previewers available for both the Data General and the TI.

T A&M2 Texas A&M, Ken Marsh, 409-845-4940,
Bitnet: KMarsh@TAMNII

T A&M3 Texas A&M, Norman Naugle,
409-845-3104

The QMS driver supports inclusion of QUIC graphics commands via specials as well as landscape printing.

T A&M4 Texas A&M, Thomas Reid, 409-845-8459,
Bitnet: X066TR@TAMVM1

The \TeX rox package includes a GF/PK/PXL to Xerox font converter (PXLrox2), and utility to build TFM files from licensed Xerox fonts (Xetrix). The programs are all written in C. Fonts not present on the Xerox printers can be printed as bitmaps on printers with the graphics handling option (GHO).

At present the \TeX rox package is being distributed on a twelve-month trial basis; the trial is free for U.S. educational and government institutions, \$100 for foreign or commercial institutions. Licensing agreements will be available when the trial offer expires.

\TeX sys \TeX sys, Joachim Schrod, Kranichweg 1,
D-6074 Rödermark, Federal Republic Germany,
+49 6074 1617

The LaserJet driver supports graphics inclusion in device dependent format. PK font files are used. This program is proprietary. Contact \TeX sys for further information.

Tools Tools GmbH Bonn, Edgar Fuß,
Kessenicher Straße 108, D-5300 Bonn 1,
Federal Republic of Germany

The Tools implementation of \TeX and the drivers listed are described in *TUGboat*, Vol. 8, No. 1.

TRC Fin'l'd Technical Research Centre of Finland,
Tor Lillqvist, +358 0 4566132, Bitnet: tml@fingate

UBC University of British Columbia, Afton Cayford,
604-228-3045

UCB University of California, Berkeley,
Michael Harrison, Arpanet: `vortex@berkeley.arpa`

UCIrv1 University of California, Irvine,
David Benjamin

UCIrv2 University of California, Irvine,
Tim Morgan, Arpanet: `Morgan@UCI.ARPA`

U Del University of Delaware, Daniel Grim,
302-451-1990, Arpanet: `grim@huey.udel.edu`

The distribution includes a program to convert font files generated by METAFONT to Xerox font format.

UIC University of Illinois at Chicago,
Don Hosek, Bitnet: `U33297@Uicvm`, Internet:
`U33297@Uicvm.Uic.Edu`

U Ill University of Illinois, Dirk Grunwald,
Arpanet: `Grunwald@M.Cs.Uiuc.Edu`

The previewers are available via anonymous FTP in the directory `pub/iptex.tar.Z` on `a.cs.uiuc.edu`.

U Köln Univ of Köln, Federal Republic of
Germany, Jochen Roderburg, 0221-/478-5372,
Bitnet: `A0045@DkOrrzko`

U Mass University of Massachusetts, Amherst,
Gary Wallace, 413-545-4296

U MD University of Maryland, Chris Torek,
301-454-7690, Arpanet: `chris@mimsy.umd.edu`

The UNIX Imagen driver is on the UNIX distribution tape. The drivers may be obtained via anonymous FTP from `a.cs.uiuc.edu` in the directory `pub/iptex.tar.Z` or from `mimsy.umd.edu` in the directory `tex`.

U Mich University of Michigan, Kari Gluski,
313-763-6069

UNI.C Aarhus University, Regional Computer
Center, Denmark

URZ University of Heidelberg, Federal Republic of
Germany, Joachim Lammarsch, Bitnet: `Rz92@Dhdurdz1`

U Shef University of Sheffield, England,
Ewart North, (0742)-78555, ext. 4307

Utah University of Utah, Nelson H. F. Beebe,
801-581-5254, Arpanet: `Beebe@Science.Utah.edu`

All of the Beebe drivers are distributed together. They are available on IBM PC-DOS floppy disks (about 6), or 1600bpi 9-track tape in TOPS-10/20 BACKUP/DUMPER format, VAX/VMS BACKUP format, UNIX tar format, and ANSI D-format. Send tape or disks for a copy. The programs are available for anonymous FTP from `SCIENCE.UTAH.EDU` on the Internet; information is in the file `PS:<ANONYMOUS>OOREADME.TXT`. A VAX/VMS binary distribution is available for anonymous FTP (password `guest`) from `CTRSCI.UTAH.EDU`. `OOREADME.TXT` in the login directory gives details. On JANET, the programs may be obtained from the directory `aston.kirk::[public.texdvi210]`. 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`. Graphics is supported only in the DVIALW (PostScript) driver.

U Wash1 University of Washington,
Pierre MacKay, 206-543-6259,
Arpanet: `MacKay@June.CS.Washington.edu`

The programs listed under U Wash1 are all on the standard UNIX distribution tape.

U Wash2 University of Washington, Jim Fox,
206-543-4320, Bitnet: `fox7632@uwacdc`

The QMS driver for the CDC Cyber was written under NOS 2.2 and supports graphics.

Vander Vanderbilt University, H. Denson Burnum,
615-322-2357

Wash St Washington State University, Dean
Guenther, 509-335-0411, Bitnet: `Guenther@Wsuvm1`

Wash U Washington University, Stanley Sawyer,
314-889-6703

The IBM PC LN03 driver is a modified version of Flavio Rose's DVI2LN3. Graphics support is provided through inclusion of LN03 plotfiles and line drawing specials. All three PXL formats on the PC are supported. The program is available free of charge with the receipt of a blank disk and return mailer.

W'mann Weizmann Institute, Rehovot,
Israel, Malka Cymbalista, 08-482443,
Bitnet: `Vumalki@Weizmann`

Xerox Xerox, Margaret Nelligan, Xerox
Printing Systems Division, 880 Apollo Street,
El Segundo, CA 90245, 213-333-6058

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

This driver supports graphics inclusion in device dependent format. PK font files are used. This program is proprietary. Contact XOrbit for further information.

Yale Yale University, Jerry Leichter,
Arpanet: `Leichter-jerry@Cs.Yale.Edu`,
Bitnet: `Leichter@Yalevms`

DVIDIS is available for anonymous FTP from `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.

Screen Previewers — Multi User Systems

■ Data General MV

T A&M1

■ DEC-20

OSU2 ASCII Output

Utah BBN Bitgraph terminal

■ HP9000/500

Utah BBN Bitgraph terminal

■ IBM MVS

GMD GDDM supported devices: IBM 3179, 3192, 3193, and 3279

Milan1 Tektronix 4014

■ **IBM VM/CMS**

UIC Terminals connected through 7171 Protocol converters: Tektronix compatible, VT-640 compatible, GDDM driven IBM 3179 and 3279 terminals, GDDM driven Tektronix 816

DVIview may be obtained by sending \$30 (to defray duplication costs), a blank tape, and a return mailer to Don Hosek. The program is still in the developmental stages, and enhancements will be made in the future. The program uses PK files.

Wash St GDDM driven IBM 3179 and 3279 terminals

Uses PXL files at 120dpi. Allows viewing of the page in eight parts normal size or three parts compressed.

W'mann IBM 3279, 3179-G

Previewing is provided by DVI82, the Weizmann driver for the Versatec plotter. The program uses PXL files.

■ **UNIX**

Utah BBN Bitgraph

U Wash1 DMD5620

Uses GF, PK, or PXL files at 118dpi. tpic output is supported. The program consists of two parts: a program running on the host computer and another that is downloaded to the terminal.

■ **VAX VMS**

Adelaide AED 512, ANSI-compatible, DEC ReGIS, DEC VT100, DEC VT220, Visual 500, 550

Uses PK or PXL files.

DECUS Tektronix 4014

Uses PK, GF, or PXL files.

INFN DEC ReGIS

Uses PXL files.

Talaris Talaris 7600, 7800

Utah BBN Bitgraph

Screen Previewers — Microcomputers and Workstations

■ **Amiga**

Rad Eye

Uses PK files. Included with AmigaTeX.

■ **Apollo**

Arbor

Uses GF, PK, and PXL files. Preview is available for \$500.

U Ill X-11 Windows System

■ **Atari ST**

TeXsys

Tools

■ **Cadmus 9200**

U Köln

■ **IBM PC**

Arbor, PTI EGA, MCGA, UGA, Hercules, Olivetti, Tecmar, Genius full page, ETAP Neftis, Toshiba 3100, AT&T 6300

Uses GF, PK, and PXL files as well as tuned PostScript fonts (the base set available with PostScript printers). Preview of integrated bit map graphics, font substitution, magnification on the fly, two-up display of pages, and searching for character strings are supported. Preview is available for \$175.

Aurion, PTI EGA, 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. Maxview is available for \$125.

PTI

Uses fonts in GF, PK, or PXL format. On the fly magnification, on the fly inclusion of DVI files, font substitution, and 256 character fonts are supported. PTIVIEW is available for \$149.

T A&M3 EGA, CGA, Hercules

The cdvi program is available for \$175.

■ **IBM PC/RT**

U Ill X-11 Windows

■ **Integrated Solutions**

UCIrv1

Utah BBN Bitgraph

■ **SUN**

Arbor

Uses GF, PK, and PXL files. Preview is available for \$500.

UCB

UCIrv2

U Ill X-11 Windows, Sunview Window System

Uses GF, PK, and PXL files.

■ **Vaxstation/Unix**

U Ill X-11 Windows

Uses GF, PK, and PXL files.

■ **Vaxstation/VMS**

Arbor GPX(UIS)

Uses GF, PK, and PXL files.

Preview is available for \$500.

INFN GPX(UIS)

Uses PXL files.

Philips GPX(UIS)

RTI GPX(UIS)

Uses PK files at 78, 94 and 112dpi. Written in ADA. Source is included.

Yale GPX(UIS)

Uses PK files at 300dpi.

Low-Resolution Printers on Multi-User Systems — Laser Xerographic, Electro-Erosion Printers

	Amdahl (MTS)	CDC Cyber	Data General MV	DEC-10	DEC-20	HP9000 500	IBM MVS	IBM VM/CMS VM/UTS	Prime	Siemens BS2000	Sym-bolics Lisp	UNIX	VAX VMS
Agfa P400							SEP	SEP		Saar		Saar SEP	SEP
Canon				Utah	Utah	Utah						Canon Utah	Utah
DEC LN03				Utah	Utah	Utah						Utah	DEC NLS Procyon Utah
Golden Laser 100				Utah	Utah	Utah						Utah	Utah
HP LaserJet Plus				Utah	Utah	T A&M2 Utah			OSU1			Arbor Utah	Arbor LaserPrint Utah
IBM 38xx, 4250, Sherpa							GMD1 URZ	GMD1 Wash St					
Imagen	Arbor UBC		T A&M1	Stanford Vander	Columb. Utah	Utah	Arbor	Arbor W'mann			MIT	Arbor U Md Utah	Arbor NLS Utah
Kyocera												MPAE	LaserPrint MPAE
Océ 6750													Océ
PostScript printers				Utah	Utah	Arbor Utah		Arbor	OSU1		MIT	Arbor Carleton MIT Utah	Arbor DECUS Sydney Utah
QMS Lasergrafix	Arbor	U Wash2	T A&M1			T A&M2	Arbor GMD1	Arbor GMD1	OSU1 T A&M3	GMD1	MIT	Arbor MIT U Wash1	Arbor GA Tech T A&M3 Talaris
Talaris													
Xerox Dover				CMU								Stanford	
Xerox 2700II		Bochum		OSU2 Xerox				ENS				Xerox	
Xerox 9700	Arbor U Mich						Arbor T A&M4	Arbor T A&M4				U Del	ACC Arbor T A&M4

Low-Resolution Printers on Multi-User Systems — Impact and Electrostatic Printers

	CDC Cyber	Cray	Data General MV	DEC-10	DEC-20	HP9000 500	IBM MVS	IBM VM	Prime	UNIX	VAX VMS
Apple ImageWriter					Utah	Utah				Utah	LSU Utah
DEC LA75, LP100					OSU2 Utah	Utah				Utah	Utah
Epson FX/RX					Utah	Utah				Utah	Utah
Facit 4542											INFN
Florida Data					MR						
MPI Sprinter					Utah	Utah				Utah	Utah
Okidata					Utah	Utah				Utah	Utah
Printronix					Utah	Utah				Utah	Utah
Toshiba					Utah	Utah				Utah	Procyon Utah
Varian											Sci Ap
Versatec	U Köln	PPC	T A&M1	GA Tech Vander	U Wash1		GMD1 U Milan2	W'mann	LLL	U Wash1	Caltech NLS

Low-Resolution Printers on Microcomputers and Workstations — Laser Xerographic, Electro-Erosion Printers

	Amiga	Apollo	Atari ST	HP1000	HP3000	HP9000 200	IBM PC	Integrated SUN Solutions
Agfa P400							SEP	
Canon			Utah				Utah	Utah
Cordata LP300							PTI	
DEC LN03			Utah				Utah Wash U	Utah
Golden Laser 100			Utah				Utah	Utah
HP 2680				JDJW	PTI			
HP 2688A				JDJW		HP		
HP LaserJet Plus	Rad Eye	Arbor	TeXsys Tools	TRC Fin'l'd		MPAE	Arbor LaserPrint MPS, PTI XOrbit Utah	Utah
Imagen		Arbor OCLC	Utah				Arbor PTI Utah	Arbor Sun U Md Utah
Kyocera			LaserPrint				LaserPrint	
PostScript printers	Rad Eye	Arbor				Arbor	Arbor MPS PTI Utah	Arbor MIT Utah
QMS Kiss, Smartwriter	Rad Eye							
QMS Lasergrafix		Arbor Scan					Arbor PTI	Arbor MIT U Del
Xerox 9700		COS Scan						T A&M4

Typesetters

	Apollo	CDC Cyber	HP3000	IBM MVS	IBM PC	IBM VM/CMS	Siemens BS2000	Sperry 1100	Sun	UNIX	VAX VMS
Allied Linotype CRTronic											Procyon
Allied Linotype L100, L300P					PTI						
Allied Linotype L202					PTI						Procyon
Autologic APS-5, Micro-5					Arbor PTI				Arbor	Arbor	Arbor Interg'ph
Compugraphic 8400					Arbor PTI						NLS
Compugraphic 8600					Arbor PTI	Wash St		UWisc			NLS
Compugraphic 8800					Arbor						
Harris 7500										SARA	
Hell Digiset				GMD2			GMD2				