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, etc.

Corrections, updates, and new information for the list are welcome; send them to Don Hosek, Bitnet DHOSEK@HMCVAX (postal address, page 255).

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 Arpanet: BNB@Seed.AMS.com

Arbor ArborText, Inc., Bruce Baker, 313-996-3566, Arpanet: bwb%arbortext@umix.cc.umich.edu

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.

A-W Addison-Wesley, Brian Skidmore, 617-944-3700, ext. 2253

Addison-Wesley supports graphics on all Macintosh software, and on Imagen, PostScript, and QMS laser printers on the IBM PC.

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

Caltech1 California Institute of Technology, Glen Gribble, 818-356-6988

Caltech2 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.

GA Tech GA Technologies

GMD Gesellschaft für Mathematik und Datenverarbeitung, Federal Republic of Germany, Dr. Wolfgang Appelt, uucp: seismo!unido!gmdzi!zi.gmd.dbp.de!appelt

HMC Harvey Mudd College, Don Hosek, Bitnet: DHOSEK@HMCVAX

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

IAM Institut für Angewandte Math, Univ of Bonn, Federal Republic of Germany, Bernd Shulze, 0228-733427, Bitnet: BESCHU@DBNUAMA1

INFN INFN/CNAF, Bologna, Italy, Maria Luisa Luvisetto, 51-498286, BITnet: MILTEX@IBOINFN

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

Intergraph Intergraph, Mike Cunningham, 205-772-2000

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

K&S Kellerman and Smith, Barry Smith, 503-222-4234

The MacIntosh drivers and the VAX/VMS Imagen driver support graphics.

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: `MI040L@D6O6WD01`

MR Math Reviews, Patrick Ion, 313-996-5273

NJIT New Jersey Institute of Technology, Bill Cheswick, 201-596-2900, Arpanet: `cheswick@jvnca.csc.org`

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

OSU2 Ohio State University, John Gourlay, 614-422-1741, `gourlay.ohio-state@csnet-relay`

Pers Personal TEX, Inc., Lance Carnes, 415-388-8853

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

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

Versatec output from TEXspool is produced via the NETPLOT program. TEXspool 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

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

SLAC Stanford Linear Accelerator Center, 415-854-3300

The SLAC drivers are on the standard CMS distribution tape.

SRI SRI International

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, Rick Brown, 619-587-0787

All of the Talaris drivers support graphics.

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@TAMNIL`

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 TEXrox package includes a DVI driver (TEXrox), a GF/PXL to Xerox font converter (PXLrox2), and a utility to build TFM files from licensed Xerox fonts (Xetrix). The programs are all written in C. Xetrix currently runs only under UNIX.

At present the TEXrox 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.

THD Technische Hochschule Darmstadt, Klaus Guntermann, Bitnet: `XITIKGUN@DDATHD21`

Drivers developed at THD are not public domain; contact the distributors listed below for further information. All these drivers use PK format font files. Drivers for laser printers support graphics in device dependent format.

Drivers for the Kyocera F-1010 and F-2010 are distributed by LaserPrint, P. O. Box 35, D-6101 Fränkisch Crumbach, Federal Republic Germany; +49 6164 4044.

The preview driver (written in CWEB) has been ported to a VAXstation II GPX, using UIS library functions; for further information, contact Philips Kommunikations Industrie AG, TEKADE Fernmeldeanlagen, Attn. Dr. J. Lenzer, Thurn-und-Taxis-Str., D-8500 Nürnberg, Federal Republic Germany; +49 911 5262019.

Information on the VAX/VMS driver for Philips Elpho 20 can be obtained from Klaus Guntermann.

All other drivers, for the Atari ST, are distributed by Kettler EDV Consulting, P. O. Box 1345, D-8172 Lenggries, Federal Republic Germany; phone +49 8042 8081.

Tools Tools GmbH Bonn, Edgar Fuß, Kaiserstraße 48, 5300 Bonn, Federal Republic of Germany

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

TRC Finland 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`

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.

U Köln Univ of Köln, Federal Republic of Germany, Jochen Roderburg, 0221-/478-5372, Bitnet: `AO045@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.

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

UNI.C Aarhus University, Regional Computer Center

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@Utah-Science`

The Beebe family of drivers was described in *TUGboat, Vol. 8, No. 1.* 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`

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

Screen Previewers

▪ Data General MV

T A&M1 See above for contact name.

▪ IBM MVS

Milan1 See above for contact name.

Drives Tektronix 4014 terminal.

GMD See above for contact name.

▪ IBM VM/CMS

HMC See above for contact name.

DVIview is a previewer written in WEB that can drive VT640-compatible terminals connected to the mainframe by either a 3705 controller or Series-1/7171 protocol converter. It 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.

W'mann See above for contact name.

Previewing on IBM 3279 and 3179-G terminals is provided by DVI82, the Weizmann driver for the Versatec plotter. The program uses PXL files.

▪ Siemens BS2000

GMD See above for contact name.

▪ UNIX

Adelaide Programs are on distribution tape.

The DVItoVDU program is capable of driving the following terminals: AED 512; ANSI-compatible; DEC ReGIS; DEC VT100; DEC VT220; Tektronix 4014; and Visual 500, 550.

Talaris See above for contact name.

The Talaris driver supports the Talaris 7800 terminal. Tektronix graphics are supported on-screen.

Utah See above for contact name.

The Beebe driver family includes a driver for the BBN Bitgraph display.

▪ VAX VMS

Adelaide Programs are on distribution tape.

The DVItoVDU program is capable of driving the following terminals: AED 512; ANSI-compatible; DEC ReGIS; DEC VT100; DEC VT220; Tektronix 4014; and Visual 500, 550.

INFN See above for contact name.

The INFN drivers include support for DEC VT125 and Tektronix 4014 terminals.

Talaris See above for contact name.

The Talaris driver supports the Talaris 7800 terminal. Tektronix graphics are supported on-screen.

Utah See above for contact name.

The Beebe driver family includes a driver for the BBN Bitgraph display.

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	IBM VM/UTS	Prime	Siemens BS2000	Sym-bolics Lisp	UNIX	VAX VMS
Agfa P400								IAM						
Canon					Utah	Utah							Canon Utah	Utah
DEC LN01													U Wash1	NJIT
DEC LN03														K&S Procyon DEC
HP LaserJet Plus					Utah	Utah							Arbor Utah	Arbor Utah
IBM 38xx, 4250, Sherpa								SLAC Wash St						
Imagen	Arbor UBC		T A&M1	Stanford Vander	Columb. SRI Utah	Utah	Arbor	Arbor SLAC W'mann				MIT	Arbor U Md Utah	Arbor K&S Utah
Philips Elpho														THD
PostScript printers					Utah	Adelaide Arbor Utah		Arbor				MIT	Arbor Carleton MIT Utah	Utah
QMS Lasergrafix	Arbor	U Wash2	T A&M1			T A&M2	GMD	Arbor		T A&M3	GMD	MIT	Arbor U Wash1	Arbor GA Tech T A&M3
Symbolics					U Wash1								U Wash1	U Mass
Talaris							Talaris	Wash St					Talaris	Talaris
Xerox Dover					CMU								Stanford	
Xerox 2700II		Bochum			OSU2								OSU2	
Xerox 9700	Arbor U Mich						Arbor T A&M4	Arbor T A&M4	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	VAX UNIX	VAX VMS
Apple ImageWriter					Utah	Utah				Utah	LSU Utah
DEC LP100					OSU2						
Facit 4542											INFN
Florida Data					MR						
MPI Sprinter					Utah	Utah				Utah	Utah
Okidata					Utah	Utah				Utah	Utah
Printronix			T A&M1		Utah	Utah				Utah	Utah
Toshiba			T A&M1		Utah	Utah				Utah	Procyon Utah
Varian											Sci Ap
Versatec	U Köln	PPC	T A&M1	GA Tech Vander	U Wash1		GMD U Milan2	W'mann	LLL	U Wash1	Caltech2 K&S

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

	Apollo	Apple Mac-intosh	Atari ST	HP1000	HP3000	HP9000 200	IBM PC	ICL Perq	Integrated Solutions	SUN	Texas Instr PC	VAX-station VMS
Canon							Utah	GMD	Utah	Utah		
Cordata LP300							Pers					
HP 2680				JDJW	Pers							
HP 2688A				JDJW		Caltech1 HP						
HP LaserJet Plus			THD Tools	TRC Finl'd		MPAE	Arbor THD Utah		Utah	Utah	Arbor	Arbor
Imagen	Arbor OCLC						A-W Arbor Pers Utah		Utah	Arbor Sun Utah		
Kyocera			THD				THD					
Philips Elpho			THD									
PostScript printers	Arbor	A-W K&S				Arbor	A-W Arbor Pers Utah		Utah	Arbor MIT Utah	Arbor	Arbor
QMS Lasergrafix	Arbor Scan						A-W Arbor Pers			Arbor MIT U Del	Arbor	
Talaris							Talaris			Talaris		
Xerox 9700	COS Scan									T A&M4		Arbor

Low-Resolution Printers on Microcomputers and Workstations — Impact, Electrostatic Printers, and Video Displays

	Apollo	Apple Mac-intosh	Atari ST	Cadmus 9200	HP1000	HP3000	IBM PC	Integrated Solutions	SUN	Texas Instr PC	VAX-station VMS
Apple ImageWriter		A-W K&S					MR Utah	Utah	Utah		
Diablo						Pers					
Epson			Tools		JDJW	U Shef	A-W Milan1 Pers U Shef			T A&M1	
Fujitsu			THD	U Köln							
GE 3000	COS										
NEC			THD								
MPI Sprinter							Utah	Utah	Utah		
Printronix							Utah	Utah	Utah	T A&M1	
Star			THD								
Texas Instruments 855										T A&M1	
Toshiba							A-W Pers Utah	Utah	Utah		
Video display	Arbor	A-W K&S	THD Tools	U Köln			A-W Arbor Pers	UClrv1 Utah	Arbor UCB UClrv2	T A&M1	Arbor THD

Typesetters

	Amdahl (MTS)	Apollo	CDC Cyber	DEC-20	HP3000	HP9000 200; 500	IBM MVS	IBM PC	IBM VM	Siemens BS2000	Sperry 1100	SUN	UNIX	VAX VMS	VAX-station VMS
Allied Linotype CRTronic														Procyon	
Allied Linotype L100, L300P	Arbor	Arbor				Arbor		A-W Arbor Pers				Arbor	Arbor	Arbor	
Allied Linotype L202								Pers						Procyon	
Alphatype CRS				AMS											
Autologic APS-5, Micro-5	Arbor	Arbor COS Scan		Arbor	Arbor			Arbor Pers	Arbor			Arbor	Arbor	Arbor Interg'ph	Arbor
Compugraphic 8400					U Shef			Pers						K&S	
Compugraphic 8600			UNI.C				Wash St	Pers	Wash St		U Wisc			K&S	
Harris 7500													SARA		
Hell Digiset							GMD			GMD					