HX-Series Display Adapter

Software Drivers Release 2.0

TwinFocus AutoCAD Release 9 Display List
AutoCAD Release 10 Display List
AutoShade/AutoSketch
8514A Compatible Adapter Interface
Microsoft Windows

Software Users Guide
Addendum

This HX-Series Display Adapter Software Users Guide Addendum is intended for use with the HX-Series Display Adapter and provides instructions for the installation of the second generation of HX drivers. The previous drivers supplied with the product have been upgraded and new drivers have been added to the list. The most prominent addition being the IBM 8514A Adapter Interface compatible driver.

Diskette Contents

The following is a list of the software provided on the accompanying diskette and a brief description of each file. In cases where the new driver or file has the same filename as on the previous (Release 1.0) diskette, the old file should be replaced with the newer version.

\ (Root Directory)

HX.TBL	Script file for the DINSTALL program.
HXINIT.EXE	Initialization program for the HX-Series Display Adapter. This program set the HX for proper VGA pass-thru operation.
INSTALL.EXE	This program determines the monitor configuration and initializes the HX-Series Display Adapter by calling the HXINIT.EXE program. Upon completion, the INSTALL.EXE program calls the DINSTALL.EXE program.
DINSTALL.EXE	This is the main installation program. It creates the proper directory and copies the files to their appropriate destination.
VERTICOM.LBL	An I.D. file used by the DINSTALL.EXE program.

\HXWIN (Microsoft Windows Drivers)

(HI-RES 1024 x 768 Windows Drivers)

  HXWIN.DRV

  HXWIN.GRB

  HXWIN.LGO

(VGA-RES 640 X 480 Windows Drivers)

  HXWIN8.DRV

  HXWIN8.GRB

  HXWIN8.LGO

\HXACAD (AutoCAD Drivers)

VERTHXDL.EXE	AutoCAD Release 10 Display List Driver
VERTHXTF.EXE	AutoCAD Release 9 TwinFocus Driver
CR12x20.EXE	Font loader for 12x20 Courier font.
TR8x16.EXE	Font loader for 8x16 Times Roman font.
CONF.EXE	Configure program. May be used to configure any of the AutoCAD Drivers provided on this diskette.
VERTHX.EXE	Standard (non-display list) Driver for either Release 9 or Release 10 of AutoCAD, AutoShade and AutoSketch.

\HX8514A (8514A Adapter Interface Compatible Drivers)

AFI.EXE	This is the Adapter Interface Driver.
*.FNT	These three (3) files are font styles available for use by system programmers and application programs running with the A.F.I.

INSTALL.EXE

The install program performs the installation of both the HX system software (creation of an HX-Series system files subdirectory, copying of files and other housekeeping functions) and the installation of specific application software drivers supplied with your HX-Series display adapter.

The Install program may be invoked by following these steps:

1. At the DOS prompt (A or C), insert the supplied HX Utilities diskette in the floppy disk drive.

2. Change to that drive (A: for example) by typing

    A:<return>

3. Type in the following:

    INSTALL <return>

You should see the sign-on "Verticom HX-Series Software Installation".

Now follow along with the on-screen prompts. You will first be asked for the number of monitors installed on your system (ONE Monitor System or TWO Monitor System).

The next Menu system will appear with the sign-on "Verticom HX-Series Display Adapter Installation Program". You will then be asked if you are installing an HX/AT or an HX/MC card. You may use either the number of the selection, the cursor star (along with <return>) or mouse to make the selection.

Next you will be asked if this will be a single or dual monitor installation. If you are using the HX board in pass-thru mode then you should select "ONE Monitor System" otherwise select "TWO Monitor System".

Page- 3

Then you will be presented with the "Installation Main Menu". The main menu offers six (6) choices.

1. HX Display Adapter System Software

2. AutoCAD ADI Rel. 9,10 Driver

3. TwinFocus AutoCAD Rel. 9 Driver

4. Display List AutoCAD Rel. 10 Driver

5. IBM 8514A A.I. Compatible Driver

6. HX Windows Driver Info

Each of these choices is described below.

Installing HX-Series System Software

The installation of HX-Series System Software consists of copying the files supplied on the HX-Series Utilities diskette to your hard disk and configuring your system so that HXINIT.EXE is run each time you start your system.

Automatic Installation: When "1. HX-Series Display Adapter System Software" is chosen from the main menu, the following tasks will be performed:

1. Creation of a subdirectory on your hard disk called \HXFILES (or directory of your choosing).

2. Copying files from the HX-Series Utilities diskette to that sub-directory.

3 Modification or creation as necessary of the path statement contained in the **AUTOEXEC.BAT** file in the root directory of your hard disk so that the \HXFILES subdirectory is part of that path statement.

4   Modify the **AUTOEXEC.BAT** file in the root directory of
your hard disk so that the **HXINIT** program is run each time
you start your system. **HXINIT** properly configures your
VGA card on power up to work with the HX-Series display
adapter (HX/AT installations only.)

Upon exit, the Install program will prompt you to restart your system
using the CONTROL/ALT/DEL key sequence or by powering down
your system.

This will allow DOS to read the newly modified **AUTOEXEC.BAT**
file on your hard disk and properly configure the HX-Series and com-
panion display adapters.
NOTE: **HXINIT.EXE** must be run each time the system is powered-
on or reset. Run **HXINIT** for dual monitor system and run **HXINIT C**
for single monitor system (VGA pass-thru).

Manual Installation: Those of you who are familiar with DOS and
wish to bypass the Install program may do so. The   n of the
\HXFILES subdirectory and the copying of all HX-Series diskette files
to this subdirectory is provided as a means to automatically make a
back up copy of these files on your hard disk. If you bypass the Install
program, make sure that you provide yourself with an appropriate back
up copy of the contents of the HX-Series Utilities diskette.

Installing Autodesk ADI Driver

The "2. AutoCAD ADI Rel. 9,10 Driver" driver will support AutoCAD
Version 9, AutoCAD Version 10 and AutoSketch on the HX/AT or
HX/MC at a resolution of 1024 by 768. The driver consists of three
files; **VERTHX.EXE** and two font files (the two described above).
All must be present in the same subdirectory as the AutoDesk product
that they will support.

Automatic Installation: When "2. AutoCAD ADI Rel. 9,10 Driver" is
chosen from the main menu of the Install program, the Install program
will automatically copy the ADI driver files to a hard disk subdirectory
where you have installed your Autodesk product. The Install program

will supply C:\ACAD as a default but you can choose any other appropriate name as required for your installation.

Manual Installation: Copy the files **VERTHX.EXE** and the font files from the supplied HX-Series Utilities diskette to the subdirectory where you have installed your AutoDesk product.

Install TwinFocus AutoCad Driver

The Verticom AutoCAD TwinFocus ADI driver will support AutoCAD Version 9 on the HX/AT or HX/MC at a resolution of 1024 by 768. The driver consists of three files; **VERTHXTF.EXE**, two font files (the two defined above) and **CONF.EXE**. All must be present in the same subdirectory as the AutoDesk product that they will support.

Automatic Installation: When "3. TwinFocus AutoCAD Rel. 9 Driver" is chosen from the main menu of the Install program, the Install program will automatically copy the appropriate driver files to a hard disk subdirectory where you have installed AutoCad version 9. The Install program will supply C:\ACAD as a default but you can choose any other appropriate name as required for your installation.

Manual Installation: Copy the files **VERTHXTF.EXE**, the font files and **CONF.EXE** from the supplied HX-Series Utilities diskette to the subdirectory where you have installed your Autodesk product.

Display List AutoCAD Driver

The Verticom AutoCAD Display List ADI driver will support AutoCAD Version 10 on the HX/AT or HX/MC at a resolution of 1024 by 768. The driver consists of three files; **VERTHXDL.EXE**, two font files (the two defined above)and **CONF.EXE**. All must be present in the same subdirectory as the AutoDesk product that they will support.

Automatic Installation: When "4. Display List AutoCAD Rel. 10 Driver" is chosen from the main menu of the Install program, the Install program will automatically copy the appropriate driver files to a hard disk subdirectory where you have installed AutoCad version 10.

The Install program will supply C:\ACAD as a default but you can choose any other appropriate name as required for your installation.

Manual Installation: Copy the files **VERTHXDL.EXE** and the font files from the supplied HX-Series Utilities diskette to the subdirectory where you have installed your Autodesk product.

Starting Autodesk Applications With Verticom Drivers

To run your Autodesk application with the standard ADI driver, follow these steps.

1.   Make sure that your mouse or tablet driver is installed. See the documentation that accompanied your mouse or tablet for details.

2.   Switch to the Autodesk subdirectory by typing:

cd \ACAD<return>

3.   Load the appropriate Verticom supplied Font into the system by typing:

LDFONT<return>

4.   Execute the Verticom supplied AutoCAD driver by typing:

VERTHX<return>

5.   Start your AutoDesk product as in the Autodesk documentation.

Configuring the AutoCAD Driver

Any of the AutoCAD drivers may be configured by the user. Please refer to the HX-Series Display Adapter Software Users Guide for instruction on the Configuration of the Driver. Note: You must use the **CONF.EXE** program on the Release 2.0 Diskette to configure these new Drivers. The procedures, however, are the same with the exception of adjusting the menu font size as defined below.

Configuring the AutoCAD Menu Font Size.

Each AutoCAD driver may be used with fonts of differing size. The default size is 12x20. The font is configurable via the CONF.EXE program. To 'size' the font the user must run the CONF.EXE program on the AutoCAD driver the user wishes to use. One of the questions of the CONF.EXE program prompts the user to define the size of font spacing desired. This allows the user to define the amount of space allowed for each font character. Once the driver is configured the appropriate font file must be loaded along with the driver before invoking AutoCAD.

IBM 8514A Adapter Interface Compatible Driver

The Verticom 8514A Adapter Interface (A.I.) compatible driver will support software applications written to the A.I. on the HX/AT or HX/MC at resolutions of both 1024 by 768 and 640 by 480. The AFI.EXE file is a ram resident A.I. driver which must be loaded prior to the operation of the application program.

Automatic Installation: When "5. IBM 8514A A.I. Compatible Driver" is chosen from the main menu of the Install program, the Install program will automatically copy the appropriate driver file to the hard disk subdirectory where you have installed the HX system files. The Install program will supply C:\HDIPCDOS as a default but you can choose any other appropriate name as required for your installation.

Manual Installation: Copy the file AFI.EXE from the supplied HX-Series Utilities diskette to the subdirectory where you have installed your HX system files.

Note: If you are installing the A.I. driver for use with Intergraph's Microstation, you will need to load the latest version of the Microstation A.I. driver in addition to the AFI.EXE. This driver is available from Intergraph.
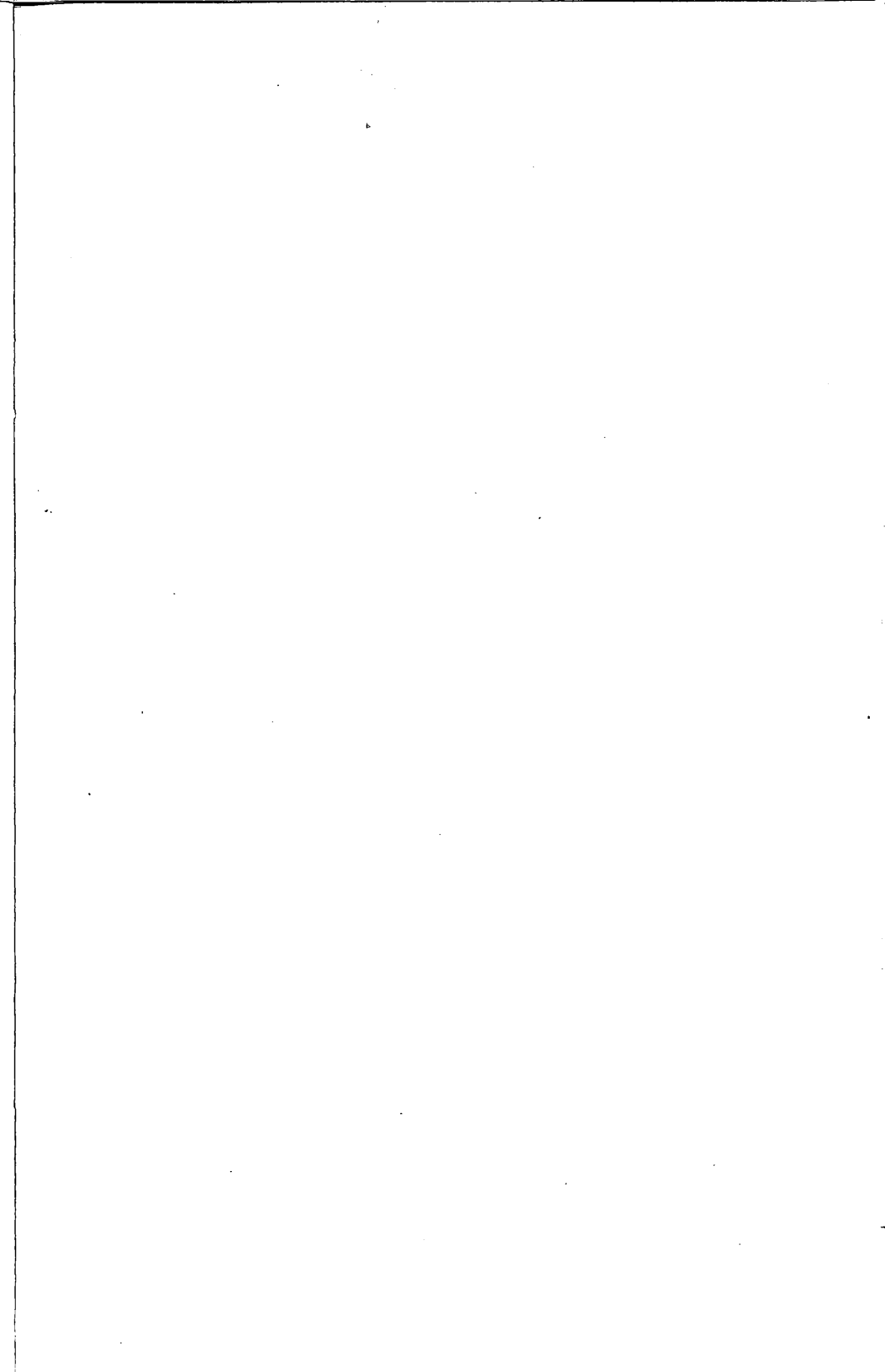
Learning About the HX-Series Windows Driver

The Verticom HX-Series Windows drivers will support Microsoft Windows 2.1 or Windows 286 on the HX-Series display adapter at a resolution of 1024 by 768. When you choose "6. Learn About the HX-Series Windows Driver" from the main menu of the Install program, you will be presented with an outline of the steps necessary to install this driver in conjunction with the [SETUP] program supplied with your Windows package.

Any Windows compatible application such as Aldus PageMaker that run under Windows version 2 can be used with these drivers either using the standard Windows environment or the "run-time" version of Windows 2. These drivers do not support Windows/386.

To install the HX-Series Windows driver follow these steps:

1.   Start the [SETUP] program (the Windows installation program) as described in your Windows documentation. When your are asked to specify a display adapter, choose "OTHER". Follow the on-screen prompts and when directed to, insert the HX-Series Utilities diskette in your floppy diskette drive. Specify the \HXWIN directory on the SETUP command line. This will inform the SETUP program where the HX Windows drivers can be found.

2.   The [SETUP] program will read the HX-Series Utilities diskette and display a list of the drivers available on this diskette. In this case two drivers will be listed (Verticom HX-8 Display V2.1.B1 and Verticom HX-4 Display V2.1.B1). These two drivers correspond to the number of bit planes of video memory on the HX board. If you have an HX16 then specify the four bit plane driver - Verticom HX-4 Display V2.1.B1 otherwise specify the eight bit plane driver - Verticom HX- 8 Display V2.1.B1.

3.   Choose the appropriate driver and continue the Windows installation process to completion.