



# **AutoCAD™ Drivers for HP Plotters and Printers**

**Installation and Use Guide**



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### About this edition

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New editions are complete revisions of the manual. Change sheets, which may be issued between editions, contain additional information. The edition dates change only when a new one is published. Minor corrections that do not affect the function of the product may be made at reprint without a change to the print date.

Many product updates and fixes do not require manual changes and, conversely, manual corrections may be done without accompanying product changes. Therefore, do not expect a one to one correspondence between product updates and manual revisions.

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### More information

You can refer to any of these documents for more information:

- *AutoCAD Installation and Performance Guide* (varies with release)
- *AutoCAD Reference Manual* (varies with release)
- Documentation supplied with your plotter.

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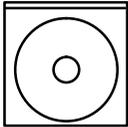
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## General information

The drivers delivered with your HP plotter can be summarized as follows:



<i>Diskette* label</i>	<i>For AutoCAD releases</i>	<i>See page</i>
HP-GL/2 Driver for AutoCAD Releases 10, 11, 12 & 13 (v 4.x) for MS-DOS	10 and 11 (386)	7
	12 and 13	13
HP-GL/2 Driver for AutoCAD Releases 12 & 13 (v 4.x) for Windows 3.1	12 and 13	14
HP-GL/2 Driver for AutoCAD Releases 13 & 14 (v 4.x) for Windows 95 and Windows NT	13 and 14	14



\* Your driver may be distributed on media other than a diskette, for example, on a CD-ROM or downloaded from a web site. In such cases the term “diskette” should be read to include this alternative media, and the “diskette label” is the identification of the set of files that constitute the driver.

- If you are installing the driver on a network server, check the network installation instructions on page 6.

All diskettes are write-protected.

All versions of the driver support the HP-GL/2 graphics language.

The installation process for each operating environment is described on the page indicated above. In the instructions, type only the text shown in **bold** face. Check the AutoCAD release and operating environment details at the top of each page to ensure that you are reading the correct section.

If you are unsure about which release of AutoCAD you have, you can find out by loading AutoCAD and reading the About... information, available from the **About** command; the AutoCAD release number is stated there.

If you need more help with AutoCAD, contact your authorized AutoCAD dealer.

If you have difficulty using the driver with your plotter, click on the **Help** button for some hints on troubleshooting. If any problem persists, or if a repair is needed, contact the HP dealer or HP Sales and Support office where you purchased the plotter.

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## Before you begin

Here's what you should have already completed before you install the driver:

- The installation of AutoCAD.
- Plotter setup, using the instructions which were delivered with the plotter.
- You must have run AutoCAD at least once before installing the driver.
- When you install the driver, make sure that you are *not* running AutoCAD.

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## Which devices are supported?

AutoCAD supports the following HP-GL/2 plotting devices through either a parallel or serial connection:

- HP DesignJet Series (except the original DesignJet)
- HP DraftMaster SX/RX/MX
- HP DraftMaster Plus Series
- HP DraftPro Plus
- HP LaserJet Series
- HP PaintJet XL 300
- HP 7600 Series Electrostatic plotter models.

References in this guide to “your plotter” mean any HP-GL/2 device from this list, including HP LaserJet and HP DesignJet *printers*.

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## AutoCAD Printer Description (.APD) files

AutoCAD Printer Description (.APD) files are used by this driver to support particular classes of device. This driver can support new HP devices through new APD files.

APD files provide driver services that are specific to a device. You can check which device is serviced by an APD file by typing out and checking the information at the start of the file.

IMPORTANT

**Do not save or otherwise modify an APD file, as it contains non-textual information.**

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## Parallel or serial communications?

AutoCAD supports parallel connections and therefore, where possible, we **strongly recommend that you configure AutoCAD and your HP plotter to use a parallel rather than a serial connection.**

If you intend to use serial communications between your computer and the plotter, you should make sure the plotter's parity setting is no parity.

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## HP DesignJet plotters and printers

AutoCAD supports the Hewlett-Packard DesignJet series plotters and printers through a serial or parallel port. It is recommended that you use the parallel port. If you use a serial port, set the DesignJet at 9600 baud, with 8 data bits, 1 stop bit, no parity, and hardware handshaking XON/XOFF.

### Long-axis plots

Most DesignJet models can produce long-axis plots and have an optional expanded mode (on some models called "smaller margins") for page formats and margins; refer to your plotter documentation for details. This mode is set on the device's front panel or setup sheet. You must ensure that the software settings match those of your plotter by using Advanced Media Options from the HPCONFIG command.

A long plot is produced when you select any size greater than 64 inches. The following prompt is displayed:

Long axis plot is selected. Plotter steps/inch = nnn

Plot in the normal manner. For best result, plot to extents, do *not* rotate the plot, and use an explicit 1-to-1 scale (not Scale to Fit).

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## Stopping your plotter

To stop a plot while AutoCAD is sending vectors to the plotter, abort it by pressing [Esc] on your PC under Windows, or [Ctrl+C] under MS-DOS.

To stop your plotter after AutoCAD has finished sending all the vectors, clear the plotter memory as follows:

- HP DraftMaster X Series: Press the [Cancel] button on the plotter.
  - HP 7600 240D/E: Press the [Reset] button on the plotter.
  - HP 7600 250/255/355: Press the [Plot Management] key. Select Queueing Operations, then select the plot and delete it from the queue.
-

**Network installation**

- HP DesignJet Series: Press the [Cancel] button on the plotter.
- HP DraftPro Plus: Press the [Cancel] button on the plotter.

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## Installing a driver on a network

If you install an AutoCAD driver on a network, the process is basically the same as installation on a workstation. It is in two parts:

- 1 Installation on the server.
- 2 Configuration and operation on each client.

### Installation on the server

Install the driver on the server, according to the process described on the following pages:

<i>Operating environment</i>	<i>AutoCAD releases</i>	<i>See page</i>
MS-DOS	10 and 11 (386)	7
	12 and 13	13
Windows 3.1	12 and 13	14
Windows 95 and Windows NT	13 and 14	14

You will require read/write access to the AutoCAD directories on the server.

### Configuration and operation on the clients

Configure each client in the usual way, and test as described for each AutoCAD release.

<i>AutoCAD releases</i>	<i>See page</i>
10 and 11 (386)	9
12 and 13	15
14	16

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## Installing a driver for AutoCAD 386 release 10 or 11

This section explains how to install the ADI 4.1 HP-GL/2 driver (PLPHPGL2.EXP) and set up AutoCAD 386 releases 10 and 11 for your HP plotter.

- If you are installing a driver for MS-DOS release 12 or 13, go to page 13.
- If you are installing a driver for a Windows version of AutoCAD, go to page 14.

Follow these step-by-step instructions to install the driver software, and enable AutoCAD to use it.

To complete this procedure you only need to know the path to the directory where your version of AutoCAD has been installed, e.g. C:\ACAD.

The step-by-step instructions below assume:

- That you want to install your drivers in a directory named C:\ACAD. If you have chosen a different location you should substitute it in the following instructions.
- That you will use drive A. If you are using drive B, substitute B for A. (If there is one flexible disk drive, it is drive A.)

To install the driver

- 
- 1 Insert the diskette labelled  
HP-GL/2 Driver for AutoCAD  
Releases 10, 11, 12 & 13 (v 4.x)  
for MS-DOS  
supplied with the plotter into the flexible disk drive on your computer (usually drive A).
  - 2 Get to the DOS prompt. For example, quit AutoCAD; you may also need to re-boot your system in DOS mode.
  - 3 Type the following to change the active drive to A:  
**a:** [Return]  
The DOS prompt will change to:  
A:\>
  - 4 Type the following to begin installation:  
**install** [Return]
  - 5 When prompted select the "AutoCAD Releases 10/11 386" entry and press [Return].
  - 6 When prompted, enter the drive and directory in which you want the driver installed; to accept the default, C:\ACAD\, press [Return].

Releases 10 and 11  
**Installing (MS-DOS)**

You will see a list of files as they are transferred from the diskette onto your hard disk.

- 7 You will see a screen of text which describes the driver you have just installed and a reference to a .DOC file which provides important reference information. Read this screen and press [Return].
- 8 You have now completed the driver installation procedure; however you must now make the drivers available to AutoCAD.
- 9 If you created a batch file ACAD386.BAT when you installed AutoCAD, continue with this step; otherwise go to step 10. If you start AutoCAD by typing **ACAD386**, the above file name is correct; if not, insert the filename you use in the instructions below:
  - a Load the ACAD386.BAT file into a text editor (e.g. MS-DOS<sup>®</sup> Edit).
  - b Add the following as a new line just before the last line of text:  
**set plpadi=c:\acad\plphpgl2.exp**[Return]
  - c Save the file and exit the text editor.
  - d Skip step 10. You are now ready to configure AutoCAD to use the ADI 4.1 HP-GL/2 driver. The following section contains the details of the necessary configuration steps.
- 10 Type the following line at the C:\ACAD> prompt in order to rename the driver so that AutoCAD can automatically find it:

**copy plphpgl2.exp adiplot.exp**[Return]

You are now ready to configure AutoCAD to use the ADI 4.1 HP-GL/2 driver. The following section contains the details of the necessary configuration steps.

## Configuring AutoCAD 386 release 10 or 11 for use with your plotter

This section steps you through the standard configuration questions asked by AutoCAD and, in some cases, advises you on which selection to make.

Some of these questions are asked again when you select the “Plot a drawing” option from the Main Menu of AutoCAD; the answers you give here are used to establish a set of default values displayed at plotting time.

- 1 Start AutoCAD in the usual way.
- 2 Press [Return] when AutoCAD prompts you.
- 3 When the “Main Menu” is displayed, type **5** to select Configure AutoCAD and press [Return].
- 4 When the current configuration is displayed, press [Return].
- 5 When the “Configuration menu” is displayed, type **5** to select Configure Plotter and press [Return].
- 6 When the current plotter selection is displayed and you are asked if you want to select a different one, type **Y** and press [Return].
- 7 When the list of available plotters is displayed, type **2** to select “ADI P386” driver and press [Return].
- 8 When asked to select from the supported models, type the number corresponding to your plotter and press [Return].
- 9 When prompted, type the number of copies to be made of each plot and press [Return]. We recommend that you type **1**. If you require multiple copies of a particular plot you can specify the number at plot time—the next step explains how you can do this.
- 10 When asked if you would like the option to override the default number of plots, typed in the step above, before each plot type **Y** or **N** to indicate your choice and press [Return]. We recommend that you type **Y** so that you’ll be asked for the number of plots to be made at each plot time. If you think that you will ever want multiple copies of a plot, type **Y**.
- 11 If the device you selected in step 7 has roll-feed capability, you will see a question regarding long-axis plotting. Type **Y** or **N** to indicate your choice and press [Return].
- 12 Depending on the device you selected in step 8, you may be asked if you would like to change line weight #20. Type **Y** or **N** to indicate your choice, and then press [Return].

If you answer **Y**, you can enter a new value; this new value should be less than 25.0 mm. The default thickness is 4.0 mm. The weight value you enter will be the thickness of the line assigned to pen speed 20.

**Configuring (MS-DOS)**

- 13** When asked if your plotter is connected to a serial (sometimes called RS-232-C) or parallel (sometimes called Centronics) port, type **S** or **P** to indicate your choice and press [Return]. A list of standard port names is then displayed.

If you haven't yet connected your plotter to your computer, refer to the plotter's documentation for instructions and information on how to verify that the connection has been properly made.

**Hewlett-Packard strongly recommends that, where possible, you use the plotter's parallel port.**

- 14** When prompted, type the name of the port on the computer to which the plotter is connected and press [Return].

If you don't know which port name to enter refer to your computer documentation to identify its ports. Serial ports are referred to as COM1, COM2, ...; parallel ports as LPT1, LPT2, ....

- 15** When asked if you want to calibrate your plotter, unless you have a HP DraftPro Plus, type **N** and press [Return].

Some HP plotters, such as the HP DraftPro Plus, do not perform self-calibration, if you have one of these devices, type **Y** and press [Return]. Perform the "software-only" calibration offered here by AutoCAD.

- 16** When asked if you want to write the plot to a file, type **Y** or **N** to indicate your choice, and then press [Return]. If you type **N**, AutoCAD will send your plots to the plotter at plotting time. If you type **Y**, each time you execute a plot from AutoCAD you will get a prompt for a plot filename in which to store the plot. In this case the plot is *not* sent to the plotter. To send a stored plot file to the plotter you can either:

- Use AutoCAD's SHELL command to allow the use of MS-DOS commands without exiting AutoCAD, or
- Exit AutoCAD, and then type the following (with your actual pathname, filename and portname) at the MS-DOS prompt:

**mode portname: 9600,E,8,1,P** (for serial ports only e.g. COM1, COM2 etc.)

**copy /b C:\pathname\filename portname** (for serial and parallel ports).

- 17** When prompted to enter the size units, type either **I** for inches or **M** for millimeters, and press [Return]. All plot specifications will be in the size unit you enter.

- 18** When prompted to enter the plot origin, type your choice in the displayed units, and press [Return].

- 19** Depending on the device you selected in step 7, you may be prompted to enter the width and height of your plotting area. Choose values which are recommended in your plotter documentation according to media size, margins and the size unit you entered in step 17 above. (*Don't use the values in the table displayed by AutoCAD; they could cause your plot to be clipped.*) Type the width, type a comma, type the height, and press [Return].

**Note:** If you later decide to use a different media size, you can enter the new dimensions while using AutoCAD's PLOT command.

- 20 When prompted to enter the angle of rotation, type **0** and press [Return]. The three other choices may cause your plot to be clipped. Later, if you need to rotate a plot, it is better to enter the angle while using the PLOT command.
- 21 When prompted to enter the pen width, type your choice and press [Return]. The pen width referred to here is the distance between the parallel lines that form area fills (hatch marks) in your plots. Pen width is not the same as line weight. Refer to the online document PLPHPGL2.DOC on your driver diskette for more information on line weights.
- 22 When asked if you want to adjust area fill boundaries for pen width, type **Y** or **N** to indicate your choice and press [Return].  
  
If you type **Y**, AutoCAD will, if necessary, adjust the boundaries of polygons with the area fills to take account of the value you entered in step 19. If you type **N**, it will not adjust the boundaries.
- 23 When asked if you want to remove hidden lines, type **Y** or **N** to indicate your choice and press [Return]. This feature is not affected by the plotter driver you installed.
- 24 When prompted to specify the scale, enter your response and press [Return]. This feature is not affected by the plotter driver you installed; for more information, refer to the Plotting chapter in the *AutoCAD Reference Manual*.
- 25 If you selected a raster device, such as DesignJet, LaserJet or HP 7600, in step 8, you will be prompted to select a type of line end. Enter your choice and press [Return]. Round ends provide the best results for most AutoCAD plots.
- 26 Also for raster devices, you will see a prompt to select a type of line join. Enter your response and press [Return]. Round joins provide the best results for most AutoCAD plots.
- 27 Finally for raster devices, you will be prompted to select a type of merge control. Enter your response and press [Return].
- 28 Press [Return] to exit to the Main Menu.
- 29 When asked if you want to keep the configuration changes, press [Return].
- 30 To verify the current configuration, type **5** to select "Configure AutoCAD" and press [Return]. The displayed AutoCAD configuration will state the currently selected driver (ADI P386 plotter) and the name of your HP plotter.

The current configuration will also list the model you selected and which input/output port you have configured.

This completes the required part of the configuration.

Releases 10 and 11

### Configuring (MS-DOS)



There is a document file called PLPHPGL2.DOC on the “HP-GL/2 Driver for AutoCAD for MS-DOS” diskette. Part of this file provides reference information on the use of AutoCAD with a range of HP plotters. We recommend that you print a hard-copy of this file. Go to the directory in which the R10/11 driver has been installed. The default name of this directory is C:\ACAD. Issue the command:

**print plphpgl2.doc**

You are now ready to plot using the AutoCAD PLOT command. Refer to your AutoCAD manual for more information on using this command.

#### IMPORTANT

Hewlett-Packard recommends that while using the PLOT command you enter some user plot dimensions in the “USER SIZE” configuration menu *and* have them selected at plot time. The recommended plot dimensions when using standard media sizes are given in your plotter documentation or can be calculated as:

$$\text{media size} - \text{plotter margins} = \text{maximum plot dimensions}$$

**Note:** If cut sheet media is used with plotters such as the HP DesignJet series or HP DraftMaster series with the roll-feed option, always load media in portrait orientation. For the HP DraftPro Plus and HP DraftMaster SX/RX/MX without roll feed, you can load media in either landscape or in portrait orientation (where physically possible). However the dimensions used for the “USER SIZE” specification must be consistent with a landscape perspective; for example, the “width” dimension must be greater than the “height” dimension.

To verify that the installation and configuration was successful you should send a plot to your plotter; brief guidelines are on page 19.

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## Installing a driver for AutoCAD release 12 or 13 for MS-DOS

This section applies to driver installation on AutoCAD release 12 or 13 for MS-DOS.

- If you are installing a driver for MS-DOS release 10 or 11, go to page 7.
- If you are installing a driver on your PC for a Windows version of an AutoCAD release go to page 14.

Otherwise read on.

To complete the installation you will need to know:

- The version of AutoCAD you are installing a driver for. (If you have more than one version of AutoCAD you will need to repeat this process.) If you are unsure about which release of AutoCAD you have, you can find out by loading AutoCAD and reading the About... information, available from the **About** command.
- The path and name of the batch file that is used to start AutoCAD:

What do you type to start AutoCAD?	Name of file is:
ACADR12 <Enter>	ACADR12.BAT
or ACADR13 <Enter>	ACADR13.BAT

To install the driver

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1 Take the diskette labeled HP-GL/2 Driver for AutoCAD Releases 10, 11, 12 &amp; 13 (v 4.x) for MS-DOS and insert it in your PC's flexible disk drive.</li> <li>2 Get to the MS-DOS prompt. (For example, quit AutoCAD; you may also need to re-boot your system in DOS mode.)</li> <li>3 Enter the name of your flexible disk drive.</li> <li>4 Enter <b>install</b>.</li> <li>5 Press &lt;Enter&gt; to continue.</li> <li>6 Select your version of AutoCAD for MS-DOS.</li> <li>7 Press &lt;Enter&gt; to accept the default filename, or type your path and filename if non-default.</li> </ol> | <p><b>Example</b><br/>           (Type/choose the part in <b>bold</b> and press &lt;Enter&gt;)</p> <pre>C:&gt; C:&gt;a: A:&gt;install  <b>acadr12.bat</b> or <b>acadr13.bat</b></pre> |
|--|---|

The driver installation process is automated from this point onwards and you will be informed when the installation has been completed. How to configure AutoCAD to use the driver is described on page 15.

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## Installing a driver for Windows

This section applies to driver installation on AutoCAD release 12 and 13 for Windows 3.1 and AutoCAD release 13 and 14 for Windows 95 and Windows NT.

- If you are installing a driver for an MS-DOS version of an AutoCAD release, go to page 7 (release 10 or 11) or page 13 (release 12 or 13).

Otherwise read on.

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To install the driver

- 1 Ensure that your computer is:  
running Windows (3.1, 95 or NT), and  
not running AutoCAD.
  - 2 If you are using **Windows 3.1**, take the diskette labeled HP-GL/2 Driver for AutoCAD Releases 12 & 13 (v 4.x) for Windows 3.1 and insert it in your PC's flexible disk drive.
- or** If you are using **Windows 95** or **Windows NT**, take the diskette labeled:  
HP-GL/2 Driver for AutoCAD  
Releases 13 & 14 (v 4.x)  
for Windows 95 and Windows NT  
and insert it in your PC's flexible disk drive.
- 3 In **Windows 95** and **Windows NT 4.0**, get to the Program Manager window, open the **Start** menu and select **Run...**  
  
In **Windows 3.1** and **Windows NT 3.51**, get to the Program Manager window, open the **File** menu and select **Run...**
  - 4 In the **Run** dialog box, enter the name of your flexible disk drive and the command **setup**.
  - 5 When you see the "**HP AutoCAD Drivers Installation**" dialog box, you will see that the installation process has found your AutoCAD installations and is ready to install an appropriate driver.  
  
Select one of these installations from the list or enter the pathnames by selecting the **Specify...** button, and click on **Next>**.  
  
(If you want to install the driver for other AutoCAD installations you can repeat this installation procedure)

### Example

(Type/choose the part in **bold** and press <Enter>)

**Run...**

**Run...**

**a:setup**

**Next>**

The driver installation process is automated from this point onwards and you will be informed when the installation has been completed. How to configure AutoCAD to use the driver is described on page 15.

---

## Configuring AutoCAD release 12 or 13 for use with your plotter

If you are configuring a driver for AutoCAD release 14 go to page 16; otherwise read on.

- 1 At the AutoCAD command line enter **CONFIG**.
- 2 In the Configuration menu, enter **5** (configure plotters).
- 3 In the Plotter Configuration menu, enter **1** (add a plotter configuration).
- 4 From the list of drivers select:
  - Hewlett-Packard HP-GL/2 devices, ADI 4.x – for Autodesk by HP
- 5 Select your plotter model from the list of supported devices.
- 6 At the question “Is your plotter connected to a serial or parallel port?”, enter:
  - S** (for serial) or
  - P** (for parallel).

If in doubt, refer to the setup instructions in your plotter’s documentation and to your PC manual.
- 7 Specify, if prompted, whether your plotter is connected directly to the computer, or is attached to a network.
- 8 At the prompt “Enter port name”, enter for example:
  - COM1** for a serial port
  - LPT1** for a parallel port.

If in doubt, refer to your PC manual.
- 9 AutoCAD then displays the default configuration for the driver. You can customize this later, and so at the question “Do you want to change anything?” enter **N**.
- 10 Now add a description for this plotter; whatever you enter will become available as a plotter when you subsequently use PLOT.
  - So enter for example:
    - HP DesignJet 220 on LPT2**
    - or **HP DesignJet 650C on LPT1**
    - or **HP DraftPro Plus for mechanical drawing**
    - or **Plotter in the drawing office**

**Configuring (Windows 95 and NT)**

IMPORTANT

Do *not* leave the description blank.

In the HPCONFIG dialog box, a status line displays the current model number and the description that you entered during configuration. If you are using more than one HP-GL/2 device, you can identify each model by providing a unique description during configuration.

- 11 To exit the Plotter Configuration menu, enter **0**, and **0** again. You will be prompted with the question "Keep configuration changes?"; reply **Y** and return to AutoCAD.

Check in the driver's online Help system for more guidance on configuring and plotting. You can access this online help by typing **HPCONFIG** at the AutoCAD command prompt, and clicking on the Help button.

Now customize your configuration; see page 17.

---

## **Configuring AutoCAD release 14 for use with your plotter**

If you are configuring a driver for AutoCAD release 12 or 13, go to page 15; otherwise read on.

- 1 At the AutoCAD command line enter **Preferences**.
- 2 In the Preferences dialog box select the Printers tab sheet.
- 3 In the Printers tab sheet, select New (to add a plotter configuration).
- 4 From the list of drivers select:  
Hewlett-Packard HP-GL/2 devices, ADI 4.x – for Autodesk by HP
- 5 Now add a description for this plotter; whatever you enter will become available as a plotter when you subsequently use PLOT.

So enter for example:

- HP DesignJet 220 on LPT2**
- or **HP DesignJet 650C on LPT1**
- or **HP DraftPro Plus for mechanical drawing**
- or **Plotter in the drawing office**

IMPORTANT

Do *not* leave the description blank.

In the HPCONFIG dialog box, a status line displays the current model number and the description that you entered during configuration. If you are using more than one HP-GL/2 device, you can identify each model by providing a unique description during configuration.

- 6 Select your plotter model from the list of supported devices.

7 At the question “What is your plotter connected to?”, enter:

**S** (for serial connection) or  
**P** (for parallel connection) or  
**N** (for a network).

Specify whether your plotter is connected directly to the computer, or is attached to a network.

If in doubt, refer to the setup instructions in your plotter’s documentation and to your PC manual.

8 At the prompt “Enter port name”, enter for example:

**COM1** for a serial port  
**LPT1** for a parallel port.

If in doubt, refer to your PC manual.

You may now see a note about the use of the Windows spooler.

9 AutoCAD then displays the default configuration for the driver. You can customize this later, and so at the question “Do you want to change anything?” enter **N**.

If you want to select the newly created configuration for use, click on the Set Current button.

10 After saving the configuration, leave AutoCAD configuration.

Check in the driver’s online Help system for more guidance on configuring and plotting. You can access this online help by typing **HPCONFIG** at the AutoCAD command prompt, and clicking on the Help button.

Now customize your configuration; see the next section.

---

## Customizing the configuration for AutoCAD releases 12, 13 and 14

To customize your configuration, enter **HPCONFIG** at the Command prompt. Plotter configurations are held in files with the extension **.HPC** in AutoCAD release 12 and 13; in release 14 they are held in AutoCAD’s main configuration file.

### IMPORTANT

*You are strongly advised to run **HPCONFIG**, as its functions can make plotting significantly easier for you. **HPCONFIG** saves you having to set the same options each time you plot: you can establish a default environment for your own plots, you can establish settings that will not interfere with other users of the same plotter, and you can even set up alternative configurations for the same plotter.*

**Customizing**

From the HPCONFIG plotter configuration dialog box, you can customize your plotter by using the options that are provided. The table on the next page displays the major options and their functions, along with further configuration selections you can make in related dialog boxes. A full description of each option is available by clicking on Help. Some of these options are also available in the plotter; by setting them in HPCONFIG you ensure that other people are not affected when you share devices.

**Plotter configuration options**

<i>Option</i>	<i>Description</i>
Number of Copies	Specifies the number of copies from each AutoCAD <b>PLOT</b> command.
Quality	Selects the quality level: fast/draft, normal/final, best/enhanced or use the plotter's default setting.
Print colors	Determines the way the plotter interprets colors in the drawing and prints them, in full color, converts them to shades of gray, or converts all colors to black.
Pens...	Dialog box for defining plot merge control (whether lines are overwritten or merged), line ends and joins, area fills, and raster pattern settings. Pen assignments are determined by the pen numbers. You can also specify how non-primary colors (colors other than red, green, blue, cyan, magenta, yellow, or black) are to be rendered.
Annotations...	Dialog box for adding the drawing filename, the date and time of plotting, and the driver name to a plot, and specifying whether crop marks are to be used. Use the Crop Marks option to place cut-off marks at the corners of your plots when you use roll feed.
Media Orientation...	Dialog box for defining image and media direction and placement (landscape or portrait).
Advanced Media Options...	Dialog box for defining plot margins to avoid clipped plots. You define what is to happen when AutoCAD's scaled-to-fit option is on, and what is to happen when it is off. For plotters with a choice of margins, the settings made must match the settings on your plotter.  This dialog box also contains options for disabling the plotter's automatic cutter and for specifying that paper is to be saved.
Optimize memory	On AutoCAD release 14, this option allows you to take full advantage of the plotter's ability to print raster objects; see the Hints button for more information.

Once you have customized your configuration, you should test it; see the section starting on page 19.

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## Testing the configuration

We recommend that you test your new configuration by plotting a drawing. The procedure to do this is as follows:

- 1 Make sure that media is loaded in your plotter.
- 2 Open a simple drawing in AutoCAD. There are many .DWG files to choose from in AutoCAD's tutorial sub-directory.
- 3 At the command line, enter **PLOT**.
- 4 In the Plot Configuration dialog box, click on Device and Default Selection.
- 5 In the dialog box that appears, select the plotter description you just added in **CONFIG** or **Preferences**.
- 6 Click on OK.
- 7 In the Plot Configuration dialog box, check that:
  - The Paper Size matches your loaded media.
  - The scale (under Rotation and Origin) is what you want.
  - What to plot corresponds to the area you really want to plot.
- 8 Click on OK.

The drawing should be plotted on your plotter using the default configuration automatically selected for you in HPCONFIG.

- *If no plot appears at all*, there is a problem with the interface between plotter and PC—either the cable connection itself or the interface settings. To check either, refer to the setup instructions in your plotter's documentation. Did you select the correct interface port in CONFIG or Preferences?
- *If the content, scale or position of the plot is not as you expected*, you must customize the configuration (see page 17).

### **If your plotter does not start plotting**

Check:

- The plotter's front panel for any error message, or status lights that indicate an error.
- The AutoCAD screen for any error message.
- The physical connection between the computer and the plotter.

### **If the pen settings seem to have no effect**

- With some HP plotters, you need to specify whether the pen settings are to be taken from the software (in this case AutoCAD) or from settings made on the plotter. For example, for the HP DesignJet 250C this is part of the setup sheet. Make sure this setting is as you require, referring if necessary to the plotter's documentation.

### **If the output is distorted or unintelligible**

- If you are using a serial interface between the plotter and your computer, make sure the plotter's serial settings (baud rate and parity) match the current settings in AutoCAD. To check or change the plotter's settings, refer to the documentation that came with your plotter.

### **If you have other problems**

- See the Troubleshooting section in the online Help system.

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## **Configuring for rendered plots (for Inkjet plotters and printers and LaserJet printers)**

To “render” a plot is to apply variable shading to surfaces in order to give a three-dimensional appearance to the drawing.

Rendering is only available with this driver when used with AutoCAD Releases 12 or 13 for MS-DOS.

Before you can use the HPRENDER and HPMPLOT commands you must first have configured AutoCAD using the RCONFIG command. See your AutoCAD documentation for information on the RCONFIG command.

These AutoCAD releases include their own rendering routine, RENDER. However, we strongly recommend that, rather than this, you use the rendering routine supplied as part of this driver, HPRENDER.

HPRENDER	HPRENDER’s features are geared specifically to HP plotters. Additionally, and unlike RENDER, HPRENDER lets you specify the page size. How to configure the software for use of HPRENDER, and how to render a drawing, are explained in the online help system, which can be found by entering <b>HPRENDER</b> and clicking on the Help button.
HPMPLOT	To plot a drawing which contains a rendered viewport, but which is otherwise not rendered, use the HPMPLOT routine, which is also provided as part of this driver. How to use HPMPLOT is explained in the online help system, which can be found by entering <b>HPMPLOT</b> and clicking on the Help button.
Troubleshooting	If you have problems specific to HPRENDER or HPMPLOT, see the Troubleshooting section in the online Help system.

Releases 12 and 13

## Plotter status (MS-DOS)

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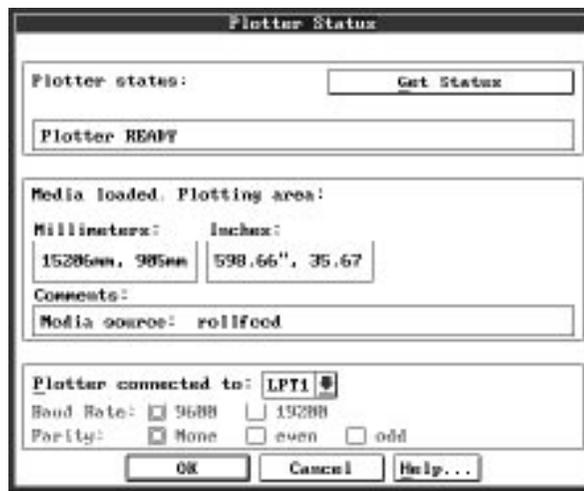
### Plotter status

This dialog box lets you track the progress of your plots as they are processed by the plotter. It also provides information about the media loaded in the plotter: size, dimensions and type.

The Plotter Status dialog box is available for the following devices connected via a parallel port:

- Most HP DesignJets, used with AutoCAD release 12 or 13 for MS-DOS.

The Plotter Status button is grayed out for devices that do not support this dialog box.



This dialog box shows the current status of the plotter—media loaded, lever/cover position, plotter ready/not ready, and so on. On the next page is an explanation of the main fields in this dialog box.

#### IMPORTANT

- Any change you make here does *not* change the interface settings in AutoCAD. If you want to change AutoCAD's settings, use CONFIG.
- The Plotter connected to, Baud rate, and Parity settings must match those of the physical selection. Otherwise Get Status cannot obtain data from the plotter.

Releases 12 and 13  
**Plotter status (MS-DOS)**

<i>Field</i>	<i>Explanation</i>
Get status	Click on this button if you want to see the latest status. (The status is <i>not</i> monitored continuously; it is only valid at the time of request.)
Media loaded	The plotting area of the media currently loaded in the plotter.
Plotter connected to	This lets you select the port to which the plotter is physically connected.
Baud Rate, Parity	This shows the serial interface <i>only for getting the plotter's status in this dialog box</i> . The initial settings are the defaults for this plotter.

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